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PAPER TRADE JOURNAL

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With Which Is Combined

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The Magazine of the Paper Industry

Paper Mill Superintendents Meet in Detroit

Convention is Largely Attended by Superintendents From Representative Paper Mill Men From All Over the Country and Canada an l is a Marked Success Both From the Educational View Point and the Fine Entertainment Furnished—F. J. Rooney is Elected President of the Organization for the Ensuing Year

DETROIT, Mich., June 7, 1926.—Why Detroit? was a question frequently asked during the past year by members of the American Pulp and Paper Mill Superintendents Association and others interested in the association, when the convention Committee definitely settled on the city of motor manufacturers as the one in which would be held the seventh Annual Convention of the Association.

The answer was quickly found on the opening day, last Wednesday, of the convention when the operating heads of various pulp and paper mills arrived from as far distant points, as Maine, Texas, Virginia and Kansas and found the greetings extended them not only by their brother members of the association, the members of the managerial staff of the Hotel Book-Cadillac but also by the citizens of the City itself.

An Ideal Convention Held

Much could be written of the courtesy and attention extended its guests by the employees of the Book-Cadillac and its praises would still remain unsung. Those who were instrumental in selecting Detroit as the convention city for 1926 were fully vindicated in their choice by the enthusiastic expressions of over three hundred members of the Association who were in attendance. Whatever was lacking in the atmosphere of pulp and paper mill plants located in cities where previous conventions were held, was made up by holding some of the divisional meetings at Monroe, Michigan, a pleasant hour's auto ride from Detroit.

Whatever misgivings were held prior to the opening of the Convention as to its success, were quickly, dispelled when the registration books were opened on Wednesday morning last. Rigidly following its policy of carrying out its program on scheduled time, the business sessions of the convention were opened promptly on Thursday morning by W. F. McGraw who inspired the opening with the same lively, hustling spirit which marked his efforts throughout the entire convention.

Edw. T. A. Coughlin Presides

President Edw. T. A. Coughlin then introduced the Rev. Peter Stair who delivered the invocation. The address of welcome on the part of the city administration, was given by the City Purchasing Commissioner, Mr. Mills, who substituted for Mayor Smith on account of the latter being confined to his home by illness. Responses to the address of welcome was given by Joseph H. Slater of the Escanaba Paper Company.

President Coughlin in his address covered the progress made by the Association during the past year, calling attention to the fact that eleven divisions of the association were now organized throughout the industry, with a total membership of six hundred. He emphasized on the results to be obtained through membership in the association by the exchange of ideas, experiences and solutions of manufacturing problems.

Humanics and Organization Development

The first paper of the business sessions "Humanics and Organization Development" was read by John R. Davis in the absence of its author John S. Schumaker who was detained on account of illness. The subject was not entirely new to the members of the association as Mr. Schumaker delivered a talk of somewhat similar character at last year's convention. In his paper as read by Mr. Davis, he emphasized it was as necessary to develop the confidence of the men over whom you have charge as well as gaining the confidence of the men to whom you are directly responsible. Inspiring the confidence of your subordinates would give you little concern about developing it in the men over you. In outlining the organization of a paper manufacturing plant, he placed the departments in this rotation;—Admistrative, Manufacturing and Sales and stated that at the outset "you will have to determine whether you are going to sell what you make, or make what you sell" and the answer would determine the supremacy of the Sales Department over the manufacturing Department or vice versa. His opinion was the policy should be to "sell what you make," that is when a mill makes diversified lines, and expressed the belief both sales and manufacturing departments would do much better under such a program. After a short discussion of this paper it was the consensus of opinion that it should be reprinted and copies sent to the adminstrative heads in the industry.

Wood Supply for the Paper Industry

Mr. Davis was again called upon to read another paper, "The Future of Wood Supply for the Paper Industry" by Dr. Hugh P. Baker which was originally scheduled for the Saturday morning session and advanced for delivery at the Wednesday morning session. This subject brought forth considerable discussion and reference was made to the rapid strides being accomplished by Canada in absorbing the paper industry of the United States, a business which in five years it was considered would amount to over a billion dollars annually. While the expressed opinions considered reforestration of vital importance to the paper industry of the United States it was considered to be the duty of the state and Federal Governments to take up this matter and adopt a definite policy for the reforestering of what are now waste timberlands. Mr. Slater of the Escanaba Paper Company spoke of what the state of Michigan was doing in this convention, and cited the fact that Michigan had reforested to the extent of thirty-five per cent of all the replantnig which had been done by all of the other states combined.

Board Division Meets at Monroe

While the general meeting was holding its session in Detroit on Wednesday the Board Division with L. T. Murphy as chairman was holding its meeting at Monroe, Michigan, as the guests of the Monroe Paper Products Company, the River Raisin Paper Company and the Consolidated Paper Company. At this session "Tom" Harvey of the Gardner-Harvey Paper Company spoke on "The Control of Thickness and Moisture on Board Papers" after which there was a round table discussion of that and other problems of Board Manufacture. After a luncheon sponsored by the Monroe Mills, those attending the Board Division session inspected the Board Mills of Monroe of which there are no finer or more modern located anywhere in this industry. The afternoon sessions of the general meeting were divided among the Book and Fine Writings, and Chemical Pulp Divisions, the former presided over by Carl Magnus of the Standard Paper Manufacturing Company of Richmond, Va.

FRED J. ROONEY, PRESIDENT

Paper Read at the Board Meeting

At this meeting the following papers were read, "The Passing of the Deekle Strap" by S. Carrol Wentz of the P. H. Glatfelter Company of Spring Grove, Pa., "Cooking and De-Inking of Old Papers" by Alfred Bryant of the Bryant Paper Company, Kalamazoo, Mich., the "A. B. C. of Hydrogen Ion Control in Paper Manufacture" by W. A. Taylor, president of La Motte Chemical Products Company, of Baltimore, Md., and "Vocational Education in Industry" by J. Norman Spawn, Educational Director and employment Supervisor of the Champion Fibre Company, Canton, N. C.

B. T. Larrabee Presides at Chemical Pulp Meeting

Benjamin T. Larrabee of the S. D. Warren Company, Cumberland Mills, Maine, presided at the meeting of the Chemical Pulp Division. Mr. Larrabee spoke on "Problems Connected with the manufacture of Suphite Pulp." T. L. Dunbar of the Stebbins Engineering Company, Watertown, N. Y. read a paper on "Digestor Bricks" which was to have been delivered by August Richter of the same firm and who was unable to be present.

B. T. LARRABEE, FIRST VICE PRESIDENT

An Enjoyable Banquet

Well satisfied with the accomplishment of the meetings, on Thursday, the evening was given over to a joint banquet for the ladies and men attending the convention and it proved to be a most enjoyable and notable affair. Rarely has a more entertaining program of speakers and artists featured any banquet than was provided for this event. The toastmaster Leo Fitzpatrick is known as "The Merry Old Chief" of Kansas City Night Hawks and the guest of honor was none other than Edgar Guest, the poet, a citizen of Detroit whose verses are read daily by millions of readers of newspapers through this country. His talk entirely in verse was based on various incidents in his life which had inspired him to write. He convulsed his audience when telling how he took his better half on a motor trip and she drove the car from

PICTURE TAKEN AT THE ANNUAL CONVENTION OF THE AMERICAN PULP AND

the rear seat. George E. MacIlwain, an economist, discovered the business outlook, for the balance of this year and held to an optimistic outlook, basing his contention on the present employment and earnings of the employed. He stated that commodity prices would continue on a downward trend for the next fifteen years. His views entirely out of harmony with those of the leading business statistical bureaus and gave figures of a most convincing character to support his outlook for the future. Musical and dancing artists rendered entertainment of real quality.

Report on White Water Waste

Friday morning opened with the reading of the report of the committee on White Water Waste of which H. W. Server of the Miami Paper Company was chairman, this being followed with papers presented by S. C. Wentz of P. H. Glatfelter Company, on the subject of "White Water" and advantages obtained by using Save-Alls; "Straw Board and Straw Paper Waste Water" presented by H. G. Funsett of Hagar Strawboard and Paper Company. Other papers presented applying to the subject of White Water were by C. K. Andrews "White Water-Newsprint", "White Water," by Harold M. Eastman, reports by E. H. Gilman and E. G. Milham of the Bryant Paper Company, tests made at the Tidewater Paper Mills by A. F. Allen, "Machine Waste Water" by Stephen W. Smith of Bird & Son Inc., "While Water" by Joseph Small and B. T. Larrabee of S. D. Warren & Co., "Handling Return Water" by W. D. Gregor, and "White Water Waste" by B. T. McBain.

This subject and that of purification of water created a lively interest and led to questioning the various speakers to obtain the fullest possible information as to how and what were the results obtained.

D. B. Davis Explains His Methods

D. B. Davis of the Hoberg Paper and Fibre Company of Green Bay, Wisconsin, who is credited with having installed the best reclaiming system yet devised and who is also credited with having operated his mill for twenty-four hours without any intake of water, explained his method of handling White Water and convinced his hearers that the reports of what he had accomplished were founded on facts.

JAMES G. RAMSEY, SECOND VICE PRESIDENT

GEORGE POUNTAIN, THIRD VICE PRESIDENT

An illustrated talk was given by Mr. Oliver of the American Filters Company, showing the operation of the disc continuous filtering system and the advantages to be derived from its use.

The New Officers

The report of the nominating committee was made before the close of the Friday morning session and its recommendation of the following list of officers for the ensuing year was unanimously adopted. Those elected were: president, F. R. Rooney of the Upson Company, Lockport, N. Y., 1st vice president, B. T. Larrabee of S. D. Warren & Company., Cumberland Mills, Me., 2nd vice president James G. Ramsey of Dill & Collins Company, of Philadelphia, Pa., 3rd vice president Geo. Pountain of Allied Paper Mills Kalamazoo, Mich., 4th vice president Joseph H. Slater, Escanaba Paper Company, Escanaba, Mich., 5th vice president Carl

PAPER MILL SUPERINTENDENTS ASSOCIATION, DETROIT, MICH., JUNE 3-5, 1926.

Magnus of Standard Paper Manufacturing Company, Richmond, Va., secretary, R. L. Eminger of Miami Paper Company and treasurer Peter J. Massey of W. H. Hall Printing Company of Chicago.

The report of the committee on resolutions was adopted as follows.

Resolutions

WHEREAS, the American Pulp and Paper Mill Superintendents Association appreciates the need for a more definite and workable program of Vocational Education.

BE IT RESOLVED, that our President appoint a committee of three members to make a survey of what has been accomplished on this important subject and to formulate a constructive program.

WHEREAS, the subject of the purification of mill effluents has a direct connection with the economical manufacture of paper and pulp.

AND WHEREAS, a practical solution to this problem will materially lower manufacturing costs, be it

RESOLVED, that the president be authorized to appoint a committee of one to investigate this problem and to co-operate with existing agencies now investigating this problem and to report at the next meeting of this association a practical solution.

WHEREAS, the problems involved in the manufacture of Mechanical and Chemical Pulp are of great importance to the members of the association who are directly interested in the manufacture of pulp, be it

RESOLVED, that the president of the association be authorized to appoint a chairman to formulate a program of activity among the Mechanical and Chemical Superintendents so that this committee will act as a clearing house for information concerning the practical problems involved in the manufacture of pulp, and be it further

RESOLVED, that this chairman be instructed to appoint a committee on membership to stimulate interest in the Mechanical and Chemical Pulp division.

WHEREAS, the present system of forest taxation is uneconomic and unsound in that it makes for rapid depletion of forests and not for the sound conservation of the Nations forest resources, be it

RESOLVED, that the American Pulp and Paper Mill Superintendents Association heartily endorses the movement for uniform and model forestry legislation throughout the United States along the lines which have already been accomplished in the State of Michigan.

WHEREAS, the American Pulp and Paper Mill Superintendents Association recognizes the need for a clearing house within the association for the exchange of practical information, concerning the solution of mutual problems in the manufacture of paper and pulp for the purpose of increasing the efficiency of the mills, be it

RESOLVED, that the President of this association be authorized to appoint a chairman of a "Practical Problems Committee" who will in turn select associate members representing the various branches of the manufacture of paper and pulp.

Friday afternoon was taken up with a visit to the plant of the Ford Motor Company where opportunity was afforded those having the courage and physical strength, to witness the building of the Ford from the blast furnace to the finished product.

The Annual Banquet

None had reported as completing the task up to the start of the Men's Banquet, Friday evening. This banquet surpassed any ever held by the association, in the quality of its speakers and entertainment. At the speakers table were C. A. Blaney formerly paper manufacturer, acting, as toastmaster, Lieut. Governor Welch of Michigan, Ex-Mayor Lewis Shank of Indianapolis, and Felix Pogenstecher, president of the Bryant Paper Company.

After listening to the Lieutenant Governors and Mr. Pogenstecher's eulogy of Governor Alex. Groesbeck, (three times elected governor of Michigan and now running for a fourth term), one can readily appreciate why the state of Michigan stands out as a state of clean and progressive government and also why the pulp and paper industry is so highly regarded in the state's industrial development. Mayor Shank proved to be a humorist of original type and kept his audience in a continuous uproar. And at his close they were crying for more.

Convention Closes Saturday

Saturday the last day of the convention, the session was addressed by S. L. Willson president of the American Writing Paper Company on the subject of "Modern Merchandising of Paper and its Relation to Production"; while other addresses were given by T. E. Dial of the Vacum Oil Company on the subject of "Lubrication as Applied to Pulp and Paper Mills"; Harold J. Payne on "Cutting Handling Costs with Industrial Trucks;" W. M. Purdy of the Gerrard Tying Machine Company on the "Tie that Binds."

A joint luncheon with the Ladies brought to a close a most successful convention from every point of view. The members of the convention committee headed by Chairman W. F. McGraw were fully deserving the shower of thanks bestowed on them for the efficient manner in which the program was carried out.

Among Those Who Attended

Among those present were—A. G. Adams, A. G. Adams & Company, Chicago Ill.; A. J. Allison, A. A. Simonds Dayton Company, Dayton, Ohio; O. W. Anderson, Gerrard Wire Tying Machine Company, Chicago, Ill.; Ross Anvil, Crystal Tissue Company, Middletown, Ohio; M. J. Argy, Cliff. Paper Company, Niagara Falls, N. Y.; G. J. Armbruster, Fraser Company, Ltd., Edmundston, N. B.; M. N. Arthur, Appleton Woolen Mills, Springfield Mass.

A. H. Barlow, Hagar Strawboard and Paper Company, Cedarville, Ohio; F. L. Barstow, U. S. Rubber Company, Fitchburg, Mass.; Charles B. Barton, Jr., Michigan Paper Company, Plainwell, Mich.; A. L. Beals, Newark, Del.; E. N. Bechard, Eastwood Wire Manufacturing Company, Belleville, N. J.; George F. Begnal, Baker Manufacturing Corporation, Saratoga Springs, N. Y.; G. W. B. Bennett, Security Rubber and Belting Company, Chicago, Ill.; Harry Bennett, Valley Iron Works Company, Appleton, Wis.; Bernard Benson, Williams Gray Company, Chicago, Ill.; N. H. Bergstrom, Bergstrom Paper Company, Neenah, Wis.; Henry Bert, Monroe Paper Products Company, Monroe, Mich.; Harold Bing, The Paper & Textile Mach. Company, Sandusky, O.; John Bingham, Dill & Collins Company, Philadelphia, Pa.; B. M. Bishop, Sonoco Products Company, Hartsville, S. C.; W. E. Bauvelt, Cameron Machine Company, Brooklyn, N. Y.; J. E. Blosser, Scott Paper Company, Chester, Pa.; P. C. Boyce, Wausau Paper Mills Company, Brokaw, Wis.; L. M. Booth, Booth Chemical Company, Elizabeth, N. J.; J. A. Bowers, Hammermill Paper Company, Erie, Pa.; Clement Bradley, Provincial Paper Company, Thorold, Canada; P. D. Bradley, Fort Howard Paper Company, Green Bay, Wis.; L. H. Breyfogle, Draper Brothers Company, Canton, Mass.; A. E. Bridge, Shartle Brothers, Middletown, Ohio; E. O'Brien, Dells Paper & Pulp Company, Eau Claire, Wis.; B. M. Briggs, Lawrence Paper Mfg. Co. Lawrence, Kansas; M. V. Brooks, Miamisburg Paper Company, Miamisburg, Ohio; J. L. Brown, Imperial Belting, Detroit, Mich.; A. F. Brunell, Paper Mkrs. Chem. Co., Holyoke, Mass.; Alfred Bryant, Bryant Paper Co. Kalamazoo, Mich.; Harry C. Busser, The York Haven Paper Company, York Haven, Pa.

John F. Carroll, New York City; Arthur S. Cesler, Texas Gulf Sulpher Company, Chicago, Ill.; G. L. Chamberlin, H. N. Hill & Co., Appleton, Wis.; C. H. Champion, Paper Mill Supply Company, Kalamazoo, Mich.; Charles Champion, Berkshire Hills Paper Company, Adams, Mass.; J. N. Conway, Hoberg Paper & Fibre Company, Green Bay, Wis.; J. H. Cooney, Peninsular Paper Company, Ypsilanti, Mich.; John P. Cooney, Peninsular, Paper Company, Ypsilanti, Mich.; John Cornell, The Paper Mill, New York City; E. T. A. Coughlin, New Jersey Coated Paper Com-

pany, Montclair, N. J.; J. M. Cram, Security Rubber and Belting Company, Chicago, Ill.; W. H. Croft, Esleeck Manufacturing Company, Turners Falls, Mass.; Wallie H. Cunningham, Mead Pulp and Paper Company, Peerless Div., Dayton, Ohio; J. E. Daley, Pt. Huron Sulphite and Paper Company, Port Huron, Mich.; Samuel Dauman, M. Gottesman & Co., Inc., New York City; D. B. Davies, Hoberg Paper and Fibre Company, Green Bay, Wis.; Nelson R. Davis, S. D. Warren Company, Cumberland Mills, Me.; V. S. Denison, Paper and Textile Machinery Company, Sandusky, Ohio; H. E. Dennie, Security Rubber and Belting Company, Chicago, Ill.; John Detmier, The Gardner, Harvey Company, Middletown, Ohio; Edwin J. Dewey, Whitmer-Parsons Pulp and Lumber Company, Finance Bldg., Phila., Pa.; T. E. Dial, Vacuum Oil Company, New York City; J. C. Dieffenderfer, Paper Makers Chemical Company, Easton, Pa.; H. J. Dow, Eastwood Wire Manufacturing Company, Belleville, N. J.; F. W. Drake, Lockport Felt Company, Newfane, N. Y.; Edward P. Driscoll, Smith Paper Company, Lee, Mass.; T. L. Dunbar, Stebbins Engineering and Manufacturing Company, Watertown, N. Y.; A. C. Dunham, Supply and Equipment Association New York City; Jas. H. Durkin, O. B. Andrews, Chattanooga, Tenn.

E. E. Eackart, Midvale Paper Board Company, Rossman, N. Y.; J. W. Eich, Gen. Dyestuff Corporation, Chicago, Ill.; Frank B. Eilers, Kalamazoo, Mich.; Charles L. Ellic, Downingtown Manufacturing Company, Downingtown, Pa.; R. F. Engelhardt, United Paper Board Company, Thomson, N. Y.; L. H. Everlien, U. S. Rubber Company, Milwaukee, Wis.

William P. Feeney, Union Bag and Paper Corporation, Cheboygan, Mich.; J. B. Fleming, John G. Fleming & Son, Dallas, Texas; A. C. Ford, The A. A. Simonds-Dayton Company, Dayton, Ohio; Jas. Foxgrover, Western Paper Makers Chemical Company, Kalamazoo, Mich.; Harry D. Frost, The U. S. Tyler Company, Cleveland, Ohio; H. G. Funsett, Hagar Straw Board and Paper Company, Cedarville, O.; George J. Forman, Schmidt and Ault Paper Company, York, Pa.; W. B. Fulton, Fulton Engineering Company, Middletown, Ohio; J. C. Gayler, S. K. F. Industries, Inc., New York City; Wm. G. Gilkey, Michigan Paper Company, Plainwell, Mich.; E. H. Gilman, Bryant Paper Company, Kalamazoo, Mich.; Gus Gilsoul, Fort Howard Paper Company, Green Bay, Wis.; Walker F. Glass, B. F. Goodrich Rubber Company, Akron, O.; P. H. Glatfelter, P. H. Glatfelter Company, Spring Grove, Pa.; N. B. Graham, Reiter Company, Elgin, Ill.; Robert M. Guie, Philadelphia Felt Company, Frankford, Phila. Pa.; John S. Gulledge, B. F. Goodrich Rubber Company, Akron, Ohio.

R. W. Haddock, Escanaba Paper Company, Escanaba, Mich.; W. Hadley, The Gardner Harvey Company, Middletown, Ohio; T. P. Hannon, U. S. Rubber Company, Columbus, O.; C. L.

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CARL MAGNUS, FIFTH VICE PRESIDENT

R. L. EMINGER, SECRETARY

PETER J. MASSEY, TREASURER

WM. F. MCGRAW, CHR. CONVENTION COM.

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T. H. Ireland, Crane Company, Chicago, Ill.

Harry Jacqmin, Fort Howard Paper Company, Green Bay, Wis.; H. S. Jarvis, Don Valley Paper Company, Toronto, Canada; E. S. Jenkins, M. W. Jenkins Sons, Inc., Kalamazoo, Mich.; H. H. Jennings, Daniel N. Hicks, Inc., New York City; Frank A. Johnson, Diana Paper Company, Harrisville, N. Y.; E. J. Johnstone, Paper Makers Chemical Company, Holyoke, Mass.

Thos. J. Keenan, New York City; George Keistead, John Richardson Company, 88 Broad St., Boston, Mass.; R. H. Kelly, Marathon Paper Mills Company, Rothschild, Wis.; D. M. Kelly, Bloomer Brothers Company, Newark, N. J.; W. A. Kelly, Northern Paper Mills, Green Bay, Wis.; Roy C. Kendall, Link Belt Company, Chicago, Ill.; A. J. Kennedy, The Sandy Hill Iron and Brass Works, Hudson Falls, N. Y.; George F. Kennedy, Hercules Powder Company, Wilmington, Del.; C. H. Kephart, York Haven Paper Company, York Haven, Pa.; Kenneth T. King, E. I. DuPont deNemours & Co., Chicago, Ill.; Harry C. Kinne, Bagley & Sewall Company, Watertown, N. Y.; C. E. Kinney, Hercules Powder Company, Wilmington, Del.; F. P. Knack, F. C. Huyck & Sons, Albany, N. Y.; L. F. Knickerbocker, Provincial Paper Company, Port Arthur, Ont.; Robert Knowles, Reading Paper Mills, Reading, Pa.; Edward Kormin, Heller & Merz Company, Chicago, Ill.; W. J. Kyle, Cameron Machine Company, Brooklyn, N. Y.; Jacob Kuss, Watervielt Paper Company, Watervielt, Mich.

F. C. Ladd, Byron Weston Company, Dalton, Mass.; P. J. Lamoureaux, M. M. Paper Company, Marionette, Wis.; Benj. T. Larrabee, S. D. Warren & Co., Cumberland Mills, Me.; John Leishman, C. H. Dexter & Sons, Inc., Windsor Locks, Conn.; H. R. Lewis, Hollingsworth & Vose Company, Boston, Mass.; W. T. Libby, Brown Company, Berlin, N. H.; Herbert Lippitt, International Paper Company, New York City; Paul D. Luce, Boston Woven Hose and Rubber Company, Boston, Mass.; Chas. J. Ludwig, Mead Pulp and Paper Company, Chillicothe, Ohio.

A. C. Mack, The Manhattan Rubber Manufacturing Company, Cleveland, Ohio; J. E. Madore, Cherry River Paper Company, Richwood, W. Va.; Peter J. Massey, W. F. Hall Printing Company, Chicago, Ill.; W. F. McClellan, Lafayette Box and Paper Company, Lafayette, Ind.; J. F. McKenzie, Don Valley Paper Company, Toronto, Canada; Wm. MacGregor, Bemis Brother Bag Company, Peoria, Ill.; E. R. MacLaren, Albany Felt Company, Albany, N. Y.; Carl Magnus, Standard Paper Manufacturing Company, Richmond, Va.; George J. Maye, Hocker Electrochemical Company, Niagara Falls, N. Y.; H. C. McDaniel, Waldorf Paper Product Company, St. Paul, Minn. Ed. McWhirter, Provincial Paper Mills, Georgetown, Ont.; John J. Meyer, Menasha Printing and Carton Company, Menasha, Wis.; Elbert G. Milliam, Bryant Paper Company, Kalamazoo, Mich.; A. A. Mintle, The Valve Bag Company, Oakmont, Pa.; L. M. Mongreig, U. S. Rubber Company, Detroit, Mich.; A. E. Montgomery, J. O. Ross Engineering Corporation, Chicago, Ill.; Don H. Montville, Shartle Brothers Machine Company, Middletown, O.; Arthur J. Monro, Buffalo, N. Y.; Chas. N. Mooney, Smith Paper Company, Lee, Mass.; T. H. Morrissey, Shuler & Benninghofen, Hamilton, Ohio; Jos. A. Moses, Falulah Paper Company, Fitchburg, Mass.; W. A. Munro, Munising Paper Company, Munising, Mich.; F. S. Murphy, Lockport Felt Company, Appleton, Wis.; L. T. Murphy, Franklin Board and Paper Company, Franklin, O.; J. A. Murray, Wm. A. Hardy & Sons Company, Fitchburg, Mass.

[illegible] G. Natwick, Lincoln Pulp and Paper Company, Ltd., Merritton, Ont.; J. D. Nevelle, Eddy Paper Corporation, Three Rivers, Can.; N. J. Niks, Chillicothe Paper Company, Chillicothe, O.; C. H. Noble, A. E. Staley Manufacturing Company, Decatur, Ill.; J. H. Noble, Oliver Filter Company, New York City; R. A. North, G. B. Fdry. & Machine Works, Green Bay, Wis.; John J. Nylund, Gen. Dyestuff Corporation, Chicago, Ill.

E. O'Brien, Dells Paper and Pulp Company, Eau Claire, Wis.; J. H. O'Connell, Diana Paper Company, Harrisville, N. Y.; C. B. Oliver, United Filters Corporation, Chicago, Ill.; Wesley M. Osborne, Newton Falls Paper Company, Newton Falls, N. Y.; J. W. Outerson, Paterson Parchmont Paper Company, Modena, Pa.

Jacob Parent, Western Board & Paper Company, Kalamazoo, Mich.; Harold J. Payne, Society for Electrical Development, New York City; J. H. Pauli, Butler Paper Company, Detroit, Mich.; Frank E. Pearson, Munising Paper Company, Munising, Mich.; M. W. Phelps, Lincoln Pulp and Paper Company, Ltd., Merritton, Ont.; A. McPhillips, R. J. Dowd Knife Works, Beloit, Wis.; Wayne A. Pitts, York Haven Paper Company, York Haven, Pa.; Theo. M. Pomeroy, Z. & W. M. Crane, Inc., Dalton, Mass.; L. D. Post, New York City; H. G. Potts, Pennsylvania Salt Manufacturing Company, Wyandotte, Mich.; Walter L. Potts, Mid West Box Company, Circleville, Ohio; George H. Pountain, Kalamazoo, Mich.; Max Poyck, The Heller & Merz Company, New York City; Ross Puette, Manchester Board and Paper Company, Richmond, Va.; Elton L. Puffer, Heller & Merz Company, New York City; W. M. Purdy, Gerrard Wire Tying Machine Company, Chicago, Ill.

J. U. Raines, Provencial Paper Mills, Ltd., Thorold, Ont.; C. T. Ransden, Beloit Iron Works, Beloit, Wis.; James G. Ramsey, Dill & Collins Co., Philadelphia, Pa.; G. F. Reale, Hooker Electrochemical Company, New York City; Michael Redmond, Kalamazoo Paper Company, Kalamazoo, Mich.; H. J. Reed, Improved Paper Machinery Company, Nashua, N. H.; Wm. Reltig, The Gardner Harvey Company, Middletown, O.; John J. Reynolds, Federal Paper Educational Company, Bogota, N. J.; Carl F. Richter, Vera Chemical Corporation, Stoneham, Mass.; A. M. Riedel, Gus Riedel & Son, Detroit, Mich.; Fred G. Bisser, Cons. Water Power and Paper Company, Stevens Point, Wis.; Ernest B. Roberts, Bemis Brother Bag Company, Peoria, Ill.; Wm. J. Robertson, Heller & Merz Company, New York City; Fred J. Rooney, The Upson Company, Lockport, N. Y.; Edward Rootes, Chicago Mill & Lumber Company, Chicago, Ill.; Geo. Roschek, Eagle Paper Company, Logan Ave., Joliet, Ill.; Harry M. Ross, Beveridge Paper Company, Indianapolis; R. S. Ross, Beveridge Paper Company, Indianapolis.

C. A. Silvis, Itasca Paper Co. Grand Rapids, Minn.; James Salter, Victoria Paper Mills, Fulton, N. Y.; J. R. Scheel, Acme Steel Co. Chicago, Ill.; Herman W. Schlosser, Ajex Paper Mfg. Co. New Orleans, La.; D. E. Scott, The Adams Bag Co., Chagrin Falls, Ohio.; W. H. Scott, Duriron Company, Dayton, Ohio; R. E. Sears, Shartle Bros. Mch. Co. Middletown, Ohio; J. W. Shanley, Simonds Saw & Elect. Co., Detroit, Mich.; P. J. Sievert, M. & M. Paper Company, Marinette, Wis.; W. H. Sievert, Michigan Carton Company, Battle Creek, Mich.; A. W. Simpson, De Grosse Paper Company, Pyrites, N. Y.; H. A. Skinner, Marathon Paper Mills Company, Rothschild, Wis.; C. B. Smith, Sandox Chemical, Chicago, Ill.; P. A. Smith, Combined Locks Paper Company, Appleton, Wis.; Jack Smith, The Gardner Harvey Company, Middletown, Ohio; Ward M. Smith, Philadelphia Paper Manufacturing Company, Manayunk, Pa.; J. Norman Spawn, Champion Fibre Company, Canton, N. C.; A. O. Spierling, Hammermill Paper, Erie, Pa.; R. J. Sprang, The Champion Fibre Company, Canton, N. C.; Howard Stansell, West Carrollton Parchment Co. West Carroll-

(*Continued on page 35*)

Another New Pulp and Paper Mill for Quebec

Work on Mistassini Pulp & Power Co. Plant to Be Proceeded with Immediately—New Organization Plans to Produce 200 Tons of Pulp Per Day, Mill to Be in Operation by End of Next Year—Twenty to Thirty Mile Railway Included in Plans

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., June 7, 1926.—John Stadler, formerly assistant general manager of the Belgo Company, and for the last two years general manager of the Newfoundland Pulp and Power Company, at Corner Brook, Newfoundland, has been appointed general manager of the Mistassini Pulp and Power Company, a new organization organized by a group of American and Canadian interests, headed by Mr. Walberg, who has attained prominence recently in this Province in connection with deals in the pulp and paper industry.

At the last auction sale of timber limits by the Quebec Government, Mr. Walberg obtained the right to exploit an area of several thousand square miles of timber limits along the Mistassini River, and also the right to develop 30,000 h.p. on condition that a pulp and paper mill will be erected within a certain time. The work will be proceeded with immediately. The company plans to produce 200 tons of pulp per day, the mill to be in operation by the end of 1927. A railway of some 20 or 30 miles is included in the plans.

Contract for a Mill at Beaupre

J. T. Donohue, president of the Ste. Anne Paper and Power Company, announces that Wm. I. Bishop has been awarded the contract for the construction of the company's paper mill at Beaupre, Que., a condition being that the mill must be constructed by December, and in operation by February. The contract is one for over $1,500,000, not including machinery. The total expenditure will exceed $5,000,000. The mill will have a daily capacity of 250 tons of news print. The company has large freehold timber limits near Beaupre which were bought from the Bayless Company recently.

Production Started at Port Alfred

Production has commenced from the first news print units of the Port Alfred Pulp and Paper Corporation at Port Alfred, Que., and the first shipments have gone forward to New York. The company promises to be an important factor in the news print industry in Canada, being one of the Holt-Gundy-McKee group. Sir Herbert Holt, president of the Royal Bank of Canada, is chairman of the Board, and Mr. McKee the president. The company's construction program calls for four units with a combined capacity of 440 tons daily.

Bathurst Co. to Increase Plant

It is reported here that the Bathurst Company, of Bathurst, N. B., has made plans to increase its production of news print from the present 60 tons per day to 300 tons.

Provincial Paper Co.'s Extension

The new extension of the Provincial Paper Mill Division at Port Arthur, Ont., will cost $500,000. Buildings are being erected to accommodate a second machine. The machine is to be installed within six months.

Spruce Falls Expansion

Progress on the $15,000,000 expansion program of the Spruce Falls Company at Kapuskasing, Ont., has been retarded somewhat as a result of the uncertainty which has arisen over the location of the proposed 500-ton paper mill. Originally it was planned that both the sulphite plant and the paper mill would be located at Kapuskasing. It is now reported that the matter has been reconsidered by the Spruce Falls Co., and as a result the paper mill may be located at Smoky Falls where power for operating both paper and sulphite mills will be developed. Arising from the uncertainty some delay has occurred in starting construction work.

"If the chemical research work of our laboratories regarding utilization of hemlock cellulose is successful, we will double and treble the size of our plant," said Lawrence Killam, president of the British Columbia Pulp and Paper Company, in an address before the foreign trade bureau of the Board of Trade in Vancouver, British Columbia.

SUPERINTENDENTS MEET

(*Continued from page 34*)

ton, Ohio; Edward L. Stansel, Provincial Paper Mills, Ltd., Mille Roches, Ont.; B. K. Steadman, Standard Paper Manufacturing Company, Richmond, Va.; Geo. W. Sterrett, National Biscuit Company, Marseilles, Ill.; L. S. Territt, Paper Makers Chemical Company, Holyoke, Mass.; R. C. Stewart, Shartle Brothers Mach. Co., Middletown, Ohio; E. H. Stoddard, Appleton Woolen Mills, Appleton, Wis.; G. E. Stoke, Tomahawk Kraft Paper Company, Tomahawk, Wis.; A. G. Stone, Marinette & Menominee Paper Company, Marinette, Wis.; T. F. Sullivan, Eddy Paper Corporation, Three Rivers, Mich.; W. P. Sullivan, Ruberoid, Joliet, Ill.; Wm. H. Sutherland, Pennsylvania Fibre Board, Inc., York, Pa.; Wm. Swartz, Ohio Box and Board Company, Rittman, Ohio.

A. A. Tanyane, Paper Trade Journal, New York City; Alden R. Taylor, Wm. L. Barrell Company, Boston, Mass.; W. A. Taylor, La Motte Chem. Products Company, Baltimore, Md.; H. E. Teter, Mead Pulp and Paper Company, Chillicothe, Ohio; E. L. Tewksbury, Stone & Woodward Company, Newton Upper Fall, Mass.; L. N. Thompson, Paper Makers Chemical Company, Holyoke, Mass.; Frank J. Timmerman, Northern Paper Mills, Green Bay, Wis.; P. Y. Tumy, General Electrical Company, Grand Rapids, Mich.

L. R. Verdon, Paper Mills Supply Company, Kalamazoo, Mich.; H. K. Vinton, Paper Trade Journal, Chicago, Ill.; Geo. Voght, Wausau Sulphate Fibre, Mosinee, Wis.

C. K. Wadham, Z. & W. M. Crane, Inc., Dalton, Mass.; J. J. Wall, General Electric Company, Milwaukee; R. J. Wainwright, Price & Pierce, Ltd., New York City; Geo. K. Walker, Finch, Pruyn & Co., Glen Falls, N. Y.; W. J. Weed, Electro Bleaching Gas Company, New York City; L. Vincent Welch, Union Screen Plate Company, Fitchburg, Mass.; Fred B. Wells, Ohio Box Board Company, Rittman, Ohio; S. Carroll Wentz, P. H. Glatfelter Company, Spring Grove, Pa.; William B. West, E. D. Jones & Sons Company, Pittsfield, Mass.; Washburg Weston, American Wringer Company, Woonsocket, R. I.; Seth Wheeler, Jr., A. P. W. Paper Company, Albany, N. Y.; Charles W. Whitaker, Natick Box and Board Company, Natick, Mass.; Frank A. Whittinger, General Dyestuffs Company, Chicago, Ill.; A. F. Wilcox, U. S. Rubber Co., Chicago, Ill.; Lee L. Wilson, Morris Paper Mills, Morris, Ill.; Ray F. Wilson, Ft. Wayne Cord Paper Company, Hartford City, Ind.; M. P. Wingate, Albany Felt Company, Albany, N. Y.; Jas. H. Wright, Cable Wires & Appleton Felts. Kalamazoo, Mich.

E. F. Yahnke, Standard Paper Company, Kalamazoo, Mich.; S. P. Yordy, Howard Paper Company, Urbana, Ohio; John F. Yordy, Howard Paper Company, Urbana, Ohio; G. H. Young, Fulton Engineering Company, Middletown, Ohio; W. A. Yule, F. C. Huyck & Sons, Albany, N. Y.

Technical Section Meets at Montreal

Summer Meeting Is Held in Conjunction with the Ninth Annual Dominion of Chemicals—Cellulose Exhibit Evidences Remarkable Progress Which is Being Made in Extending Pulp Industry in Other Spheres Than the Manufacture of Paper—Meeting Well Attended

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., June 7, 1926.—The Technical Section of the Canadian Pulp and Paper Association held its annual summer meeting in Montreal during the past week in conjunction with the Ninth Annual Dominion Convention of Chemists. The meeting was generally voted to be a highly successful one, not only in point of view of attendance and subjects discussed, but also because it gave the delegates the opportunity of attending meetings at which papers were read and discussions entered into regarding chemical problems in general as well as those appertaining to their own particular industry.

New Spheres for Pulp Industry

Those attending the meeting were immensely impressed by the remarkable progress which is being made in extending the pulp industry into other spheres than the manufacture of paper, and it was a noteworthy fact that most of the discussions had to do with the application of science to cellulose derivatives for other purposes than the manufacture of paper. Interest in this direction was much stimulated by a Cellulose Exhibit in a room adjoining the conference room. The exhibit, part of which was at Wembley last year, was, perhaps, the finest and most comprehensive of its kind ever got together. The following is a list of the exhibitors and the products they had on view:

Brompton Pulp and Paper Company, Kraft, Sulphate Paper and Pulp; Canadian Celanese Ltd., "Celanese"; Canadian Electro Products Company, Ltd., Commercial Solvents; Canadian Explosives, Ltd., (including) Dominion Cartridge Company, Flint Varnish Company, Canadian Fabricoid Company, Arlington Company of Canada, Nitralous Cellulose; Canadian Laboratory Supplies, Apparatus; Canada Paper Board Company, Paper Board; Canadian Pulp and Paper Association, News Print and similar products; Central Scientific Company, Chicago, "Cenco" Specialties; Courtaulds, Limited, Canada, Rayon Products; Dominion Textile Company, Cotton Products; Dyeing Chemical Company of Canada, Dye and subjects; Fisher Scientific Supplies, Chemical Apparatus; Glidden Varnish Company, Cellulose Lacquers; Howard Smith Paper Mills, Ltd., Fine Papers; Interlake Tissue Mills Company, Ltd., Tissue Paper; Lincoln Mills, Ltd., Fine Papers; McArthur, Irwin Ltd., Electrolytic Iron Products; Murphy Varnish Company of Canada, Ltd., Cellulose Lacquers; Riordon Sales Corporation, Ltd., Rayon Wood Cellulose and Bleached Sulphite Wood Pulp; Rolland Paper Company, Ltd., Fine Papers; Sherwin-Williams Company, Ltd., Cellulose Lacquers; Walker Company, Artificial Wood Products.

Features of the Exhibition.

The exhibit was so arranged as to show the processes by which the spruce tree—a sample of which was there—is made to produce all the varied products mentioned above, and as such it was generally voted to be a dramatic presentation of the triumphs of modern synthetic chemistry. The display resembled the floor of a department store rather than a chemical laboratory, with its colorful cellanese and viscose silks in forms ranging from the finely-spun yarn to vividly printed voiles and satins, smartly woven women's sports suits, stockings, socks and draperies, fabricoid trunks and upholstered furniture, toilet articles, cigarette stands and ash trays, tissue paper "favors," writing paper, varnishes, paints, containers for popular brands of chocolates and chewing gum, radio dials, combs, and so on.

In conjunction with the exhibit were also shown samples of the latest apparatus used in the making of the various articles. These include such apparatus as hydrogenion concentration equipment to determine acidity, an electrolytic analyser, which can be used for any metal, a universal gas apparatus, and an optical pyrometer of the filament type.

Some of the Products

It was explained that one of the cellulose products, namely, cellulose acetate, is made into aeroplane dope, non-splinter glass, eye pieces for gas masks, lacquers, non-inflammable firm, silk, textiles and insulators. Aeroplane dope is painted on the wings of planes in battle to prevent penetrating explosives from setting them on fire. The non-inflammable film is used for moving pictures to be given in a church or private hall, where there is no fire-proof cage. Cellanese silk, one of the cellulose acetate products, has some interesting qualities. It is made from cotton linters—the short fibers which adhere to the cotton seed—dissolved in glacial acetic acid. The thread, which is squeezed through a fine aperture, has elasticity of elongation and is perfectly even. This material does not wrinkle and good cross dyeing effects can be achieved in one bath.

From viscose (liquid cotton), visco silk, artificial horsehair, cellophane, textiles, bottle caps, sausage skins, sizing textiles and printing textiles are made. The silks are remarkable for their lustre.

Cellulose nitrate yields organic solvents, pigments, pyroxylin, lacquers, paint, castor oil, artificial leather, camphor, celluloid, nitroglycerine, cordite, smokeless powder, explosives, photographic film, alkali sulphide, chardonnet silk and textiles.

From the sulphite pulp are produced news print, sulphate pulp, soda pulp with its products bond book and tissue paper.

For medicinal purposes there are the by-products of these processes, which can be obtained in an extremely pure state.

The Program

The following was the programme for the proceedings at the Technical Section's meeting:

WEDNESDAY, JUNE 2

9.15 a.m.—

"Cellulose Symposium"—Chairman: Dr. Harold Hibbert, McGill University.

1. "X-Rays and Their Application to Chemistry"—Professor A. S. Eve, Dept. of Physics, McGill University.
2. "X-Rays and Crystal Structure"—Professor A. N. Shaw, Dept. of Physics, McGill University.

(Papers 1 and 2 are to be short, fifteen-minute addresses illustrated by experiments, models and slides, and to serve as introductory talks to Professor Herzog's lecture.)

3. "The Bearing of X-Ray Analysis on the Constitution and the Technical Application of Cellulose Derivatives"—Professor R. O. Herzog, Faserstoff Institute, Berlin-Dahlem.
4. "Some Fundamental Problems in Cellulose Chemistry"—Dr. Bjarne Johnsen, Hammermill Paper Company.
5. "The Action of Heat on Cellulose"—Professor J. Watson Bain, Toronto University.

1.00 p.m.—

Luncheon at Windsor Hotel—Guest of Honor—Hon. L. A. Taschereau, Premier of Quebec.

2.30 p.m.—

"Cellulose Symposium"—(Continued).

6. "Fermentation Products from Cellulose"—Professor H. B. Speakman, Toronto University.

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7. "Colloid Chemistry of Cellulose"—Professor R. O. Herzog.
8. "Celanese Silk—A New Canadian Industry"—Mr. Pratt, of the British Celanese Company.
9. "Some Problems in Wood Preservation"—J. F. Harkom, Forest Products Laboratory of Canada.
10. "Nitro-Cellulose, Its Manufacture and Uses"—J. Boiseau Wiesel, Hercules Powder Company.
11. "Nitro-Cellulose Lacquers"—Arthur Orr, The Commercial Solvents Company.

7.00 p.m.
Annual Banquet—Windsor Hotel.

THURSDAY, JUNE 3

9.15 a.m. to
12.15 p.m.—
Technical Session—Ladies' Ordinary—Chairman: H. O. Keay.
Round Table Discussion:—
1. Sulphite Cooking.
2. Chemical Problems of the Paper Mill.

12.30 p.m.—
Buffet Luncheon at Windsor Hotel.
2.00 p.m.—
Golf Tournament—Senneville Country Club.

X-Rays and the Cellulose Industry

The ordinary layman would never dream that X-rays have anything to do with the successful production of cellulose derivatives but the scientists who led off the discussions at the meeting showed that they were an important factor. The principal speaker on this subject was Professor R. O. Herzog, of the Faserstoff Institute, Berlin. In view of the fact that his address dealt with the application of the rays, introductory addresses on the rays themselves were given by Professors Eve and Shaw, of the Department of Physics at McGill University.

Professor Eve outlined the development of X-rays, illustrating his remarks by an interesting set of experiments showing the methods of producing these rays and the effect of passing them through different substances. Dr. Shaw followed with an interesting description of the application of X-rays to the measurements of crystals. He pointed out that the wave lengths of different lights are accurately known; that these waves may be deflected by the atoms of a crystal and that by suitable apparatus the distances between the atoms or curves of atoms may be measured. In making these measurements a crystal is rotated in the plane of an X-ray and tuned in, so to speak, with the ray giving definite distances of one plane from another. By taking a sufficient number of measurements, all planes may be measured and models of the crystals under examination may be built up to correspond with these measurements and so present a clear picture of the crystals and atoms in space.

Prof. Herzog, in the course of his address, which, being in German, was translated sentence by sentence, by Professor Harold Hibbert, said: "For the last seven or eight years I have conducted investigations on the structure, chemical constitution and properties of fibre, both animal and vegetable, and, thanks to the application of new methods, especially of a physical and optical character, it has been possible to obtain an insight into the inner structure of the fibre, molecule; for example, cellulose, natural silk, kelp, hair, etc., unobtainable by chemical means.

"These methods have called for very great refinement in optical and other measurements, and it has been necessary to devise special apparatus for this purpose, and the technique involved requires a considerable knowledge, not only of chemistry, but of physics, mathematics, crystallography and botany.

"The difficulty with which the scientists has to contend in the examination of these materials, in that they are what the chemist terms 'celloids,' in distinction from such common salts which we all know as crystalline in character.

"Their investigations, which involve methods capable of application to the more finely divided states of matter, have yielded much of interest to the industrialist, and it is not too much to say that the future developments of the cotton, silk and woollen industries will be profoundly influenced by the results of these investigations.

"It is an accepted fact that the improvements in the qualities of textiles, and the developments of new industries resulting from the application of wood pulp as raw material all go back to the fundamental state of matter, which is only possible to interpret correctly by the newer methods of investigation."

Wood Preservation.

J. F. Harkom, preservation specialist at the Forest Products Laboratories of Canada, read a paper on "Some Problems in Wood Preservation." He said the chief causes of deterioration in wood are decay, mechanical wear, weathering, fire, insects and marine borers. The development of the wood preserving industry to its present state has been largely due to the interest of the railways in increasing the life of ties and other forms of structural timber.

At the present time 50 per cent of the ties in the United States are treated when replaced, but only 20 per cent in Canada. The desirable features of a wood preservative are that it should be toxic to fungi, insoluble in water, be easy of application, and if possible prevent weathering and checking in some degree. The preservatives used include creosote, zinc chloride, tar and crude oil or mixtures of them, and of these creosote is the most largely used at the present time. The author pointed out the fact that progress in the industry has been slow, due to the fact that service tests extend up to 5 years, and he stressed the need for further research to the end that an odorless, toxic preservative which has the fibre binding property of an oil should be developed, which would not require to be carried by water into the wood.

Nitro-Cellulose Lacquers

An address by Arthur Orr, of the Commercial Solvents Corporation, Terre Haute, Indiana, on "Nitro-Cellulose Lacquers," opened up another interesting vista in the use of cellulose. He said that in the last five years nitro-cellulose lacquer has begun to displace paint and varnish, especialy on account of recent chemical discoveries, which has cheapened the process of its manufacture. The process was first used at Toronto during the war days, when the British Government produced acetone, the product that was so necessary in the manufacture of cordite, and which actually had a great bearing on the winning of the war. In the course of further experiments, the uses of butanol, formerly regarded as useless, have been realized, and it is largely due to butanol that the lacquer industry is so lively today.

It is only three weeks since the last automobile manufacturing company in the United States definitely committed itself to the use of lacquer for its plants, and all now use this instead of the old material.

Heating of Cellulose

Prof. J. Watson Bain, of Toronto University, in a paper on "The Action of Heat on Cellulose," reported progress on the results of an extended research now being carried on at Toronto on the decomposition of cellulose on heating. It has been found that the decomposition of cellulose is progressive and it is not yet known to what limit of time the heating may be carried on. The products of decomposition after heating for 914 hours at 210 degrees C. were found to be gases, namely, carbon monoxide and carbon dioxide and a small amount of acetic acid. The residue carried a percentage of syrupy constituents, principally glucose.

Fermentation of Cellulose

Horace B. Speakman, of the University of Toronto, presented a paper on "The Fermentation of Cellulose and its Derivatives." The author has been continuing experiments on the production of fermentation products in cellulose chiefly in connection with the manufacture of ethyl alcohol, acetic acid, acetone and butyl alco-

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hol. The work was carried on principally with waste sulphite liquor and traces of very powerful poison seriously affected the fermentation. These poisons are not definitly known and it is proposed to determine what they are, the methods of removing or preventing their occurrence. The author stressed the necessity for collaboration between chemists, engineers, and biologists, in the study of this problem.

Sulphite Cooking

The round-table discussion on sulphite cooking had the merit of revealing many of the problems which are still puzzling the chemists engaged in the industry.

E. P. Cameron, of the Forest Products Laboratory, of Canada, said lack of standardization of methods of research and of units of measurement constitutes one of the greatest drawbacks to sulphite research. Any one organization may carry on research, the results of which will not be applicable to any other plant. When these are arrived at the industry can develop tests from a scientific standpoint.

R. W. Hovey, of the Abitabi Power and Paper Company, Ltd., said research work must aim at a cheaper product of news from the sulphite mills. News print, because of the tremendous tonnage was the most important product of the sulphite industry, exceeding fine papers and specialties. At present wood yielded only 40 to 45 per cent under the sulphite cooking process. None of the chemical constituents of wood are detrimental to news, so some method of increasing production must be found. The 60 per cent of the wood at present wasted could produce a yielding fibre which would be satisfactory, though not pure cellulose. Mr. Hovey pictured a possible product of the sulphite process which would yield nearer 60 per cent on the wood than the present 40 per cent.

O. F. Bryan, of the Laurentide Pulp and Paper Company, said the increasing expense and scarcity of wood has brought the mill operators to the point where they are looking for a higher yield, even at a possible sacrifice of tonnage. The problem of penetration was a very important one facing the research laboratories. If the rate of penetration could be increased one hour it would mean increased yield of pulp.

The laboratories will be doing very valuable service if they can throw light on what goes on in the cooking process and can standardize the units of measurement. It is vital that these should be uniform. Another problem which they might settle is why such a good yield cannot be obtained from balsam as from spruce.

The solution of all these problems are apparently hidden in the digestor where the wood undergoes the sulphite cooking process. As one of the participants in the discussion remarked—"It is too bad we can't shut ourselves inside the digestor and see exactly what is taking place."

Artificial Silk

R. G. Dort, of the American Cellulose and Chemical Manufacturing Company, gave an instructive paper on artificial silk, and its methods of production from the spruce log. He dwelt on the remarkable variety of uses to which the fibre can be put in the manufacture of clothing and ornamental fabrics and said the yarn, when spun, has a great resistance to washing, will stand a tropical sun and is resistant to sea water.

Substitute Wood Pulp for Cotton

Dr. Harold Hibbert, of McGill University, who presided at the cellulose symposuim, said:

"In the forest resources of Canada we have one of our largest and most valuable assets; the problem for us is how best to develop them for the Dominion, and I suggest that this can be best accomplished through the successful prosecution of scientific research.

"One method by which we can extend the usefulness of our pulp is by substituting it in Canada for cotton in all its forms. This is being attempted by the chemists of the Dominion today and it is feasible. The successful substitution of wood pulp for cotton would benefit Canada in many ways," he said.

Chemical research in England has been responsible for the establishment of a Cotton Institute, where the problems associated with this industry are being studied, said the speaker. In Germany similar efforts are being made to understand the true nature and possibilities of fibre. In other countries the end of the war saw the intensive study of cellulose and the establishment of institutions for this purpose. Dr. Hibbert was of the opinion that Canadian chemists would devote much of their energy in the next few years to the study of this great field.

"No one who has watched the progress of the wood pulp industry and the remarkable things that can now be done with wood pulp, can doubt that the future holds still greater surprises for us," the speaker said.

Pulp and Paper Production Increases in April

The April production of paper in the United States as reported by identical mills to the American Paper and Pulp Association and cooperating organizations, showed a decrease of 5% as compared with March's production, following a 13% increase in March over February, according to the Association's Monthly Statistical Summary of Pulp and Paper Industry. All grades showed a decrease in production as compared with March, with one exception.

The Summary is prepared by the American Paper and Pulp Association as the central organization of the paper industry, in cooperation with the Binders Board Manufacturers Association, Converting Paper Mills Association, Cover Paper Association, Newsprint Service Bureau, Wrapping Paper Manufacturers Service Bureau, Writing Paper Manufacturers Association and Paperboard Industries Association.

The figures for April for same mills as reported in March are:

Grade	Number of Mills	Production Net Tons	Shipments Net Tons	Stocks on Hand End of Month —Net Tons
News print	71	144,337	143,598	18,890
Book	61	95,443	95,954	39,601
Paperboard	115	190.655	187,922	47,911
Wrapping	77	47,930	49,358	37,168
Bag	26	11,776	11,495	9,968
Fine	87	32,684	33,041	39,675
Tissue	47	13,753	13,292	16,521
Hanging	9	4,666	3,974	3,392
Felts	14	10,458	10,328	2,775
Other Grades	64	21,826	22,002	15.895
Total—All Grades		573,528	570,964	231,796

During the same period, domestic wood pulp production increased 10 per cent, this increase being distributed over all grades, with four exceptions. The April totals (mills identical with those reporting in March) as reported by the American Paper and Pulp Association, are as follows:

Grade	Number of Mills	Production Net Tons	Used Net Tons	Shipments Net Tons	Stocks on Hand end of Month Net Tons
Ground Wood Pulp	95	116,929	96,069	4,140	131,111
Sulphite News Grade	36	39,709	34,945	4,468	9,830
Sulphite Bleached	21	25,829	21,271	4,252	3,105
Sulphite Easy Bl.	6	4,105	3,411	573	893
Sulphite Mitscherlich	6	6,710	5,402	1,355	338
Sulphate Pulp	9	14,777	13,794	1,483	1,652
Soda Pulp	11	17,989	13,116	5,315	2,891
Other than Wood Pulp	2	....	51	17	10
Total—All Grades		226,048	188,059	21,603	149,830

No-Leak Paper Dish Co. To Move to Evansvile

WHEELING, W. Va., June 7, 1926.—The machinery of the No-Leak Paper Dish company, located on South McColloch street, is to be moved to Evansville, Ind., it was announced last week by E. T. Maxwell, the manager of the Wheeling subsidiary of the Champion No-Leak Paper Dish company of Toledo. Ohio. That is to be the first step in moving the local factory to that city. The decision to move the local plant to the Indiana town has only been made within the last few weeks, although the matter had been under serious consideration for some time. Arrangements for the transportation of the machinery have been completed and it will be moved to Evansville very shortly.

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Paper Business is Slowing Down in Chicago

Seasonal Dullness, However, No Greater Than Customary—Sufficient Orders Reported to be Coming in to Keep Machinery Greased Up —Warmer Weather Should Bring Some Expansion of Trade—Prices of Paper Boards Generally Considered Too Low

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., June 5, 1926.—"Business has slowed down some, but we have no particular complaint to make." That, briefly, describes the attitude of manufacturers and jobbers of fine papers, though the statement does not reveal why there should be such a placid acceptance of the slackened demand. Looking under the surface of things, it has now become evident that the approach of the seasonable dull period, which is always fraught with more or less alarm, now gives indications of becoming not so dull as was feared. Naturally, when business dropped off three to five weeks earlier than usual at this time of the year, some forebodings arose as to what it might lead to.

Depression Not Acute

Paper men are now beginning to understand that there is no bogey man in the form of acute depression to frighten them, and are settling back in complacent realization that the summer dullness in this year no greater than customary; indeed, a number of firms are gathering in sufficient orders, or what promise to be orders, to take the edge off any disappointment they might have felt, otherwise. It certainly is a pleasant feeling to see enough business coming in during the accepted dull period to at least keep the machinery greased up.

It is very likely that some of these concerns, when the great rush of business was being transacted earlier in the year, so managed deliveries as to take place during the warm weather months, and this possibly explains the statement of some heads of firms to the effect that "we are in very good position to enter the summer slackness." One such executive said: "We are going fairly well. Prices are keeping up, except in the cheaper grades, which seem to have a tendency to become a little lower, though this tendency may not develop to any great extent. And, too, there is always a little fluctuation in bond and book papers. We have heard that conditions in the east have picked up some, and if this is true it may reach us out here. Otherwise, we will not look for any resumption of activity until the end of August."

Coarse Paper

In the coarse paper line, and particularly in wrapping paper, the state of general business and farm crop conditions reacts more quickly than in such lines as book and building papers, for instance. One does not have to seek far for the cause, nor is there any complicated trade surveys involved. The reason, homely as it may be, is that when people have got money they buy things, and when they buy things, the things they buy have to be wrapped. Therefore, a siege of good or bad weather has a decided effect upon the coarse paper market; and just at this moment it may be said that, so far as the Chicago territory is concerned, business is neith- good nor bad.

J. Seibert, of the Seibert Paper Company, 30 N. LaSalle street, describes this singular phase in a most practical way: "As far as we can find out from our investigations," said Mr. Seibert, "it looks like business will get better, providing the weather permits people to do more shopping. If we get a run of warmer weather, it will certainly affect the paper business favorably. Take conditions in Chicago: They are in good shape. Look at the wonderful amount of building going on! This town is growing, and business is bound to be good. It is better now than it has been recently."

Other paper executives voiced this same sentiment, Gorge K. Gibson, of the Wausau Sulphate Fibre Company, 431 N. Michigan avenue, going a bit further in his analysis, saying: "The business outlook for the rest of the year is good. We have good crop prospects throughout this section of the country, money is plentiful, business conditions are sound, consumption of all commodities is greater, and the purchasing power of the people was never so great as it is today.

Roofing Paper Prices Firmer

Concrete evidence that the roofing paper branch of the industry is coming out of the depths in which it has been floundering for many weeks is in the form of stiffened prices for all grades. The increase has been uniformly four dollars, on stock quotations f.o.b. Chicago. No one seems to know why this should have come about, but the general surmise is that the higher prices are the result of the increased demand that has arisen since the weather became a little more endurable, and which is naturally helpful to the stimulation of interest in building operations. The dull period in roofing paper has prevailed for a longer time than is healthy for the industry, and it is now hoped that better times are in store for those who deal in this commodity.

In paper boards there seems to be volume enough, but the feeling among handlers of that product is that prices are too low. This condition is seasonable, of course, though some pessimistic predictions are heard in various places; but, to quote one of the leading firms, "We are not taking such talk very seriously. With the tonnage coming through as it now is, it looks as though things are in pretty good shape." One observation is that none of the paper product concerns are laying off men, a condition which would seem to remove cause for complaint. As it happens, the fact that such plants are working steadily makes the low price situation incongruous and disappointing to paper board handlers.

Undesirable Price Cutting Tactics

Plainly speaking, there appears to have been some price cutting in a futile attempt to corner all or most of the business, and this has brought on a very undesirable state of affairs. The situation is like that which always results from price cutting tactics, whatever the commodity may be, one in which the whole industry becomes unsettled and nobody is benefited. As one prominent paper board man graphically stated: "If people would use common sense, there would be no need of price cutting, with such tonnage as is now moving. If plants were shutting down it might be a different matter." Every cloud has a silver lining, 'tis said, and this holds good in the paper board industry, for according to custom the demand should begin to pick up appreciably after the first of July, when ordering for fall and winter needs is started, and prices will doubtless be advanced.

Little can be said of the paper stock market, in addition to that which has been said for the past three weeks. It is now the dull season, when nobody expects much buying activity and when efforts are mainly devoted to grading and storing away stocks for future orders. One does hear rumors, however, that point to certain important developments, in the future. These concern the unhappy lot of the owner of the modern, machinery-equipped paper stock plant, who is more or less helpless in the face of unethical competition; and there is talk of organization in the effort to remove some of the injustices to which they feel they have been subjected. If a local association is formed, it is claimed, the members will endeavor to avoid some of the policies that put a previous effort on the rocks. This is all very vague, however, and though it sounds mysterious, the formation of a local paper stock associa-

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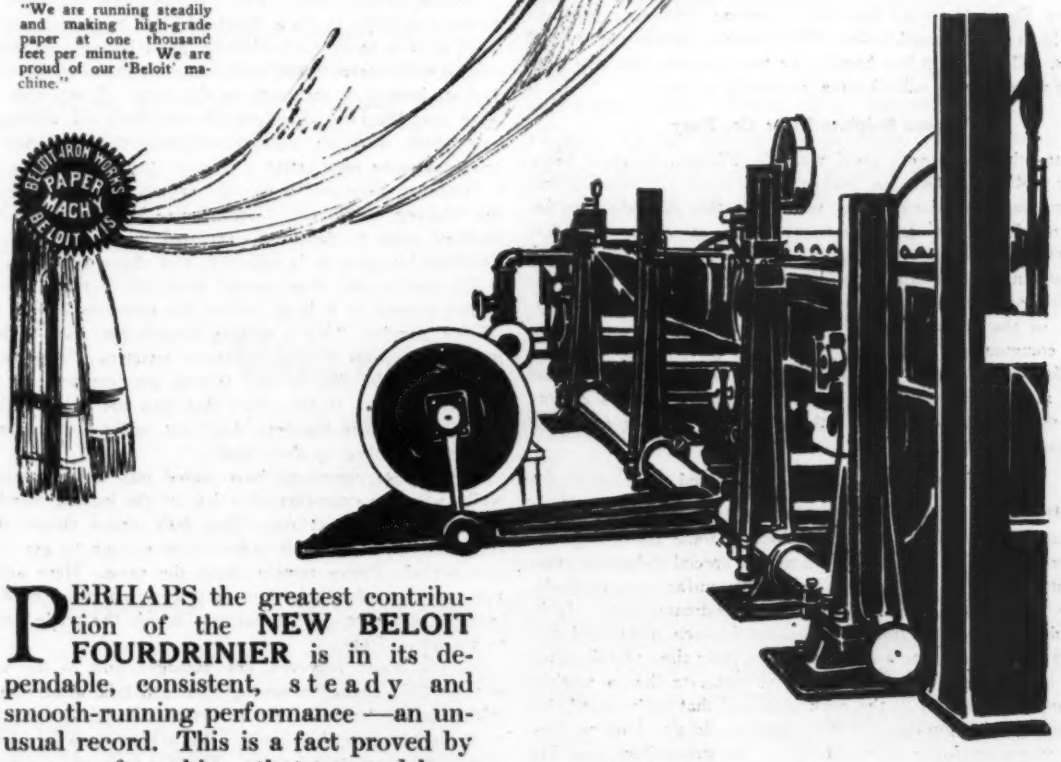

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tion would not be a surprise to some well-informed members of the trade.

C. K. Higgins, assistant secretary of the National Paper Trade Association, secretary of the Central States Paper Trade Association and secretary of the Middle States Wrapping Paper Association, will address the meeting of the Wisconsin Paper Manufacturers' Association at Wausau, Wis., June 17. J. Weyman Flint, of Dever Brothers, Milwaukee, is president of the association.

"Clearspring," a high-grade, English finish super paper placed on the market some time ago by the West Virginia Pulp and Paper Company, with headquarters at 732 Sherman street, is becoming well established in the trade. The new line is used mostly for books, catalogs and publications. This company manufactures first quality book papers and has subdivided its grades in such a manner that only a small range of quality is covered in each grade; that is to say, when a No. 1 grade is purchased, for instance, it is understood that only the very highest quality of paper is contained in that grade.

The new line of Doeskin covers recently launched by Dwight Brothers Paper Company has been receiving increasing approval in the form of increased orders. They come in several colors and weights. The Weston line handled by this company has also been keeping up very well, sales having increased, in fact.

Wausau Sulphite Fibre Co. Busy

Business has been very good with the Wausau Sulphite Fibre Company, 431 N. Michigan avenue. The mills are running full time, and sales for the first five months of this year show an increase of eleven per cent over those of the same period of last year, with the demand keeping up steadily at the present time. The company manufactures "Mosinee" kraft, on which there has been no change in price for the past three years, states George K. Gibson, of the Chicago office. Mr. Gibson, by the way, occupies a very commanding position in Chicago in more ways than one. His office is located on the twenty-third floor of the Tribune Tower, and a great octagonal spread of windows affords an excellent view of the city and of the lake front. Paper men certainly look up to Mr. Gibson.

Industrial Relations Considered

The Illinois Manufacturers' Association, of which a number of paper concerns are members, is conducting some interesting experiments in industrial relations, through a special industrial relations committee. The object is to improve manufacturing methods, increase production, reduce accidents and eliminate waste. It is proposed to have a suggestion committee in each plant, and the members would then give a certain part of their time to following up the ideas submitted. The committee suggests that a worker from the ranks meet with the committee and that cash awards be made for useful suggestions. The committee is also looking into pension plans, employee representation plans, group insurance, industrial education, and other activities of the 3,000 establishments affiliated with the association.

The final meeting (until next September) of the Chicago division of the Salesmen's Association of the Paper Industries will be held at the Old Colony Club next Monday, June 7. The meeting takes the form of round-table discussions during luncheon, and are a notable example of the friendly relations that may be fostered among competitors.

Chicago paper men who were guests of the Wil-Art, the annual get-together at the Dayton Country Club under the auspices of the Miami Paper Company, Dayton, Ohio, report a very happy occasion this year. It was the eleventh such gathering, held June 2 and 3, which takes its name from Arthur Nevius and William Sunderland, of the Miami paper concern. There were close to four hundred paper men present, and to transport the Chicago delegation two Pullman cars were chartered by advance arrangements under which the visitors occupied the same berths going and coming. The train left Chicago at 11:55 P. M. last Monday night on the Pennsylvania line, and returned Thursday. Major Curry, of McCook aviation field, gave an interesting talk, and there was a banquet at which 314 men were seated.

James H. Coy, of the Flambeau Paper Company, 111 W. Washington street, states that business is running along smoothly, but with no rush on, the situation now consisting of an endeavor to secure a sufficient quantity of business to keep the mills running. There is no tendency to load up, he stated.

The next meeting of the Wrapping Paper Association of Chicago will be held at 12:30 P. M. on Tuesday, June 8, at the Illinois Athletic Club. These affairs are much like those of the salesmen's association, with the difference that usually a speaker is previously selected to talk on a designated subject. Meetings of this organization will probably be kept up during the summer. Edgar Hall, Jr., of the Pilcher-Hamilton Paper Company, 340 N. Dearborn street, is president.

Paper Demand Slows Up in Boston

BOSTON, Mass., June 7, 1926.—A noticeable recession in general business activity in New England—following a period of about eight or nine months of relatively good business—is making itself felt to quite some extent in the Boston paper trade, according to various leaders in the trade in this zone. A majority of reports show that May was an off month—decidedly off, although the last two weeks were an improvement over the first two and June promises to be even better.

Statistics, however, show that orders received by members of the Writing, Cover and Tissue Paper Manufacturers Association declined some in April but increased in May. Total volume of incoming business, it is reported, was above that of a year ago.

The textile and shoe centers upon which many Boston paper houses depend to a large extent for generous orders, have been off for months. This is making inroads into various houses and is having serious effects in certain quarters. "New business" is the call of the day in this section and competition never was keener. Rumors to the effect that men are being taken off the road in generous numbers does not apply to Boston. Certain houses are adding to their staffs.

Fine grades, seems to have sailed into quieter waters for a while, with the exception of a few of the leading merchants who never report a quiet day. The daily order sheets show as a rule, comparatively small orders—just enough to get over a certain period. Prices remain about the same. Here and there is noticeable a slight diminishing in price in anticipation of the usual seasonal dropping off of business which the trade cannot seem to get away from.

On this point, however, one manager said to the writer this week: "This annual mourning time and talk about the expected falling off of business just because summer is coming has acted as a stimulant to this house. We are going after the business from now on—a special drive. There is no need of accepting such a shallow belief. It is not based on anything sound and the demand for paper during these coming months will be just as great as any other time if we only want to know so. We are going to prove it by going out and getting the business. The books will show it in September."

The coarse paper division is not doing much and will not until general business picks up. Krafts are moving better than anything else and of course the summer reports are calling for the seasonal supply. There has been a noticeable increase in wax and tissue orders and the last month has brought an extremely heavy demand from the flower merchants.

F. W. Leadbetter Returns from Abroad

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., May 27, 1926.—F. W. Leadbetter, president of the Columbia River Paper Mills, and of the Oregon Pulp and Paper Company, has returned with his family from an extended European trip.

Making Better Paper

Several things must be considered in making quality paper besides the furnish and among the most important of these are formation, caliper and absence of frequent lumps and foam spots.

By improving the formation, making the caliper even across the entire width of the sheet, and eliminating many foam spots and lumps, the Voith High Pressure Stock Inlet is resulting in better paper wherever it is installed.

This machine feeds the stock to the wire at the breast roll, at the proper speed, giving the entire surface of the wire for formation purposes. The number of foam spots and lumps are reduced and thru minute adjustments easily made, a sheet of uniform thickness will be produced.

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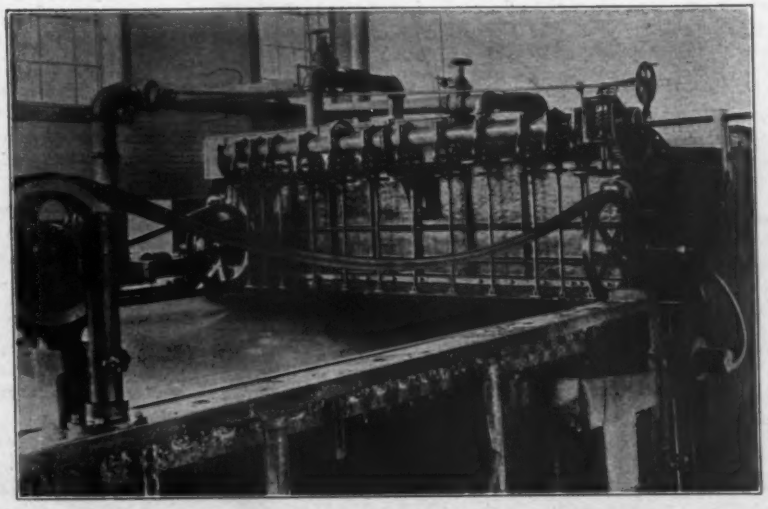
Indispensable for Wide Machines

The Voith Inlet is a lasting improvement for feeding the stock onto the wire of the modern wide paper machine. Purchasers of new machines now have Voith Inlet Equipment specified in the builders contract. When using the Inlet it is possible to discharge the stock onto the wire in a smooth steady continuous stream. The stock stream is under perfect control and can be readily adjusted to suit the class of sheet, speed and substance.



Specify Voith Inlets in New Machine Contracts

Toronto Paper Trading Becomes Rather Spotty

Even Flow of Business Interrupted by Observance of National Holidays—Movement to Stabilize Prices Finds Favor With Industry—Fort William Co. Bonds Offered for Expansion Purposes—Organization to Build New Sulphite Pulp Plant

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., June 7, 1926.—Trade in the paper line during the past few days has been rather spotty owing to large demands for some lines and small requisitions for others. The even flow of business has also been interrupted by two holidays, Victoria Day on May 24, and the observance of the King's birthday on June 3. There is a trend among the paper jobbers toward recognizing the advisability of stabilizing prices and not "shopping" around from mill to mill for specific grades. The trade now appreciates the fact, or rather is beginning to do so, that seeking new arrangements or better terms from mill after mill for permanent and regular lines has a disorganizing effect, both from the standpoint of distributors and mills. It is felt that it is much better to work in closer cooperation with the producers in the matter of supplies and fair prices. Business can be operated more successfully and profitably all around by the new plan, which is finding favor with the trade. The mills are also endeavoring to restrict any selling direct, other than to legitimate accounts.

Fort William Co. Bonds Offered

An issue of $3,500,000 6 per cent, first mortgage gold bonds is being made by the Fort William Paper Company, Fort William, Ont., for expansion purposes. Three of the largest news print groups in Canada, namely the Spanish River, Abitibi Company and Sir Herbert Holt interests, control the Fort William Paper Company. Five years ago the business commenced operations with a small outlay and has proceeded along steady conservative lines. The company will build a 75 ton sulphite pulp plant which will supply its own requirements and leave a salable surplus. When present plans are completed, the total rated daily capacity for sale will be 175 tons of news print and thirty tons of sulphite pulp. The earning record of the company has been a most satisfactory one. The purpose of the present financing is to retire the existing outstanding bonds and to provide for capital expenditure. It is expected that, in view of the strong financial position of the company, and its excellent record of production, the bond issue will be quickly absorbed. The selling price of the bonds is 98½ and the interest yield about 6.13 per cent.

New Development at Kapuskasing

A new concrete warehouse, 45 x 200 feet, is being built at Kapuskasing, Ont., by the Spruce Falls Power and Paper Company. The excavation for the new digester building is well under way. Another warehouse shed has been put up to which the present warehouse stock has been removed to make room for two new acid tanks. There are nearly 200 men employed in the new development. Seven camps are located back of the mill, with an additional cookery and a machine shop. An old sulphite storage building, which was on the site of the new extension, has been torn down.

New Paper Mill for Thorold

The ratepayers of Thorold, Ont., will vote upon a by-law on June 25 to grant a fixed assessment of $10,000 to the Superior Paper Mills, Ltd., for a period of ten years. The company will locate in the old Peerless Paper Mill and was recently granted a charter, with an authorized capital of $250,000. Among the incorporators are J. M. Cathcart, of St. Catharine's, who was for several years superintendent of the Interlake Tissue Mills plant at Merritton, and John T. Berhalter, of Toronto, who for a long period was on the sales staff of the same company. In the charter obtained it is not set forth what kinds of paper the Superior Paper Mills will make but it is understood that light weight papers will be among the ranges produced.

Tree Planting Making Progress

Under the plan of the forestry department of the Ontario government there is considerable tree planting going on in the various counties of the province, which is being carried out by farmers and others. The Hon. Dr. Jamieson, of Durham, Grey county, who is a former Speaker of the Ontario Legislature, has set out over 40,000 young trees on his 350 acre farm at Wilder's Lake, and Herbert Murdoch has planted 3,000 young trees, consisting of pine, black walnut and spruce.

Good Progress on New Board Mill

Work is going ahead rapidly on the new 50 ton strawboard plant of the Hinde and Dauch Paper Company, of Canada, in Trenton, Ont., which is located about 100 miles east of Toronto. The strawboard will be used for corrugating purposes in the parent plant in Toronto. Two buildings will be erected, one about 300 feet long, and the other 500 feet long, the latter being used for housing the new paper machine. The structure will be of concrete, brick and steel.

Notes and Jottings of the Industry

The Fielder Paper Box Company, 170 Berkeley street, Toronto, are adding two stories to their manufacturing premises and will practically double the output of their plant.

E. J. Hathaway, of Warwick Brothers and Rutter, manufacturing stationers, Toronto, delivered an instructive address last week before the Canadian Booksellers and Stationers' Association on "The Making of Books."

W. S. Barber, of the Provincial Paper Mills, Toronto, and Mrs. Barber, have gone on a trip to Los Angeles, Cal., where Mr. Barber will attend the annual convention of the Purchasing Agents of America.

E. S. Crabtree, of the Bathurst Company, Bathurst, N. B., was a caller upon the trade in Toronto during the past week.

The Guelph Paper Box Company, Guelph, at the head of which is Sam Small, intends enlarging its plant by adding a two story extension, owing to increased business.

According to local reports, another big pulp and paper industry will shortly locate in Port Arthur, Ont. The Nipigon Corporation, Ltd., which is under agreement with the Ontario government for wood limits, will erect a 400 ton pulp and paper plant. It is stated that the agreement with the city for a location on the north water front has been completed.

I. H. Weldon, president of the Provincial Paper Mills, Toronto, and former president of the Canadian Pulp and Paper Association, has been appointed a member of the executive of the Toronto Publicity Bureau.

Miss A. B. Jephcott, only daughter of Alfred Jephcott, head of the Dominion Paper Box Company, Toronto, was married recently to Arthur Charles Sanderson, of Toronto, at the King Edward Hotel.

Word received from Pine Falls, Manitoba, states that 500 men are employed on construction work of the new news print mill which is being erected there. Already the iron work of the mill is completed, and considerable concrete has been poured.

The building program of the Provincial Paper Mills, of Port Arthur, is being conducted vigorously. Several new buildings will be put up at a cost of $500,000, and a second machine will be installed and in operation by the end of the present year.

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Paper Trade Drifting Along in Philadelphia

Opening of Sesqui-Centennial Exposition Temporarily Affects Normal Routine of Paper Business—Increased Demand for Summer Paper Specialties Created by Enormous Incoming Crowds of Visitors—May Paper Trade Surpassed Volume Reported Last Year.

PHILADELPHIA, Pa., June 7, 1926.—While the city offered many diversions to detract attention from the purely business contact of its citizens, and commercial life generally was dulled by the gaieties and social associations coincident to the big celebration held in the opening week of the Sesqui-Centennial, the paper trade drifted into a resting period pending the return to more sober considerations of the normal every day affairs to succeed the unusually distracting times this week. Dealers and associates were not so much concerned with the paper market as with the lively programs which were featured in the grand opening events of the week. With 30,000 Shriners making this city their headquarters in national convention as part of the Sesqui ceremonies, and the many pageants, parades, sporting and military events, followed by musicals, concerts, dancing and banquets held on the exposition grounds, in the mammoth Stadium, or along the main thoroughfares of traffic, there were distractions galore to temporarily offset the more routine life of the business world and so the trade was allowed to drift along.

Fine Papers Hold Steady

Though the fine paper market in these early June days is less responsive to the efforts of the dealers and sales organization to promote business on account of the holiday spirit generally prevailing, reports for May show that this year's spring activities were broader than in the same period of last year and quite satisfactory as compared with the volume of business reported by other industries. None of the dealers have cause for complaint in the steadier tone which held throughout the month when the duller times of 1925 are taken into consideration. Orders were chiefly in small lots and at fairer levels of quotations, summed up with greater volume of a generalized demand for all grades of writing, printing and publishers papers.

Improved Coarse Paper Market Reported

When the Philadelphia coarse paper dealers met in their semi-monthly session at the Bourse Restaurant last Tuesday, the main topic of discussion around the luncheon table was the prevailing business trend and reports on the past month's business. There was no official discussion or report made. The comparison of notes showing the summary of May business in the coarse paper market gave a clearer evidence of the gradually improving conditions and healthier tone to the wrapping paper trade and to the general demand for specialties and seasonally active grades. With seven of the leading houses represented, the meetings comparative reports showed that business generally gained more than 5 per cent in comparison to the same period of last year and, with prices more stabilized, a net gain in actual dollars and cents of 10 per cent over the prevailing summary of the month's business in the accounting of the financial gains. It was stated by proprietors of those houses dealing in summer goods, such as ice cream and soda fountain specialties, paper napkins, drinking cups, and other season requirements, that there was enjoyed the best business to the credit of experiences in the last few years. This year's volume of May sales for summer goods was exceedingly larger than those of last year and with the waning days of the month even larger sales were reported than those of the early part.

June opened with excellent prospects for dealers in these paper wares, with a heavy demand for the week on account of the many requirements of the retailers catering to the incoming hordes of visitors to the Sesqui-Centennial celebration. With the floating population increased considerably more than half a million people from all sections of the nation and others from nearby points, the consumption of soda fountain, confectionery, outing and like requirements in paper goods soared to the pinnacle of mid-summer demands, and higher in some of the houses. The general lines of paper in the coarse grades, however, were less active, due to slackening of demand from the business houses, who were more concerned in entertainment than in the humdrum affairs of every day occurrence. The chairman of the semi-monthly meeting of the Coarse Paper Group of the Paper Trade Association was Henry Adler, of the Huff Paper Company.

Fine Paper Men Meet

Having postponed the customary meeting of the previous week, the fine paper dealers held their monthly session on Tuesday at the Poor Richard Club, and while no great importance was attached to the gathering in the way of new enterprises, the general opinions and reports of the dealers were most interesting from the angle of business information and actual experiences foretelling the future trend of the market. The newly elected president, David Lindsay, Jr., presided, while W. S. Wilcox was chairman of the gathering, in the absence of Anthony Richie, scheduled for that part of the program. The general reports were optimistic and especially glowing in the greater volume of May orders for all lines of fine papers.

W. C. Hamilton & Sons' Improvements

Additional individual motors are being installed to the units in the W. C. Hamilton & Sons Mills at Miquon, on the Delaware. Eventually, the entire mechanical equipment will be motorized with individual motors of the General Electric types. Ever since the mills passed into the control of the present ownership, they have been gradually improved and modernized and new lines of papers added. The very latest of papers to be manufactured are the line of Italian Pressed announcement stocks of papers in white and six colors. These are the first announcements to be manufactured by the Hamilton Mills. They are in deckle edge, carried in single and double thickness, and are of high grade quality adapted for the printing, stationery and engraving trades.

Waste Merchants Association to Hold Outing

Having decided to postpone the meeting which was to have taken place on Thursday evening in combination with a social session, the Philadelphia Wholesale Waste Merchants Association are planning to substitute the quarterly gathering with an outing. Secretary William J. McGarity will shortly call a meeting of officers and directors to decide upon the details of the outdoor event, to be the first held under the re-organized association of paper stock dealers and waste merchants.

John A. Murphy Wedded

With a large assembly of friends and business associates attending, the wedding of John A. Murphy, head of the Daniel I. Murphy Company, stock dealers, took place at the Cathedral of St. Peter and Paul, on June 2, when the popular young leader of the Philadelphia wholesale trade was united in marriage with Miss Irene Thorne. Many trade friends

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Inland Paper Board Co., Inc., Versailles, Conn.

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It was taken with machine operating

Note the complete absence of fog and vapor rising from the machine. A clear, dry machine room. The warm air introduced directly to pockets on machine not only increases drying capacity but greatly decreases back pressure on the engines.

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attended the wedding reception, held at the Bellevue-Stratford Hotel, following the ceremony, with Daniel I. Murphy, father of the groom and founder of the Murphy Company and his family, and William P. Kelly, his business associate. The young couple are honeymooning in Atlantic City.

W. J. McGarity Buys Norwood Paper Co.

The entire stock and fixtures of the Norwood Paper Company, which recently became involved in financial difficulties, has been purchased by William J. McGarity, head of the Penn Paper and Stock Company. The assets of the bankrupt firm have been removed to the Penn Company's headquarters in Front Street. They are paper stock, conveyors and like equipment.

Kennedy Car Liner & Bag Co. Changes

The former duties of H. B. English, who represented the Kennedy Car Liner & Bag Co. in the Philadelphia territory, have been taken over by G. Tucker, traveling representative of the manufacturers, whose headquarters are located at Selbeyville, Ind. The new representative in Philadelphia is Eastern States traveler for the manufacturers of special size bags such as those used by the piano, furniture, automobile and other industries, where larger sized sacks or containers in bags are consumed. Mr. English is now connected with the Woodstock, Ont., Canada, headquarters of the company. The local offices are in the Commonwealth Building.

Chas. W. Williams & Co., Features New Stay Papers

An entirely new idea in box makers stay papers was featured at the recent exhibit made by Charles W. Williams & Co., New York, dealers in box makers specialties, at the Paper Box Manufacturers Association Convention held here in the closing week of May. The new stay paper, known as the Quaker Creased Stay Paper, is an especially creased gum paper made in kraft according to the specifications of the Williams Company. Its virtues are that the creasing process used forms a snugger and better fitting staying paper for the consuming industry. The new product and the Mellotone, Satintone, Lustertone, Jeweltone, and Gloriatone papers were displayed at the convention as specialties of the box maker lines of the Williams company. Among those from the New York offices who visited the Convention were Vice-President Alfred D. Williams, General Manager J. E. Buell, Charles H. Hoffman, and William E. Madden, with the local manager, Elmer Renner. Another sales representative has been added to the Philadelphia organization. He is George W. Hallahan, who came to Philadelphia after an experience with the metropolitan offices in various capacities since 1923. He will tour the Western section of the State in the coming week, on the second round made since his connection with the Quaker City offices in the Bourse.

Eli Resnick & Son in New Home

Having abandoned the old temporary location at 2nd and Vine streets, the coarse paper dealers, Eli Resnick & Son, are now completely settled in the newly remodeled and modernized quarters purchased for their own use at 2nd and Brown streets. The new location gives the firm an up-to-date office and warehouse building for its mill representation business of coarse papers, specialties for the summer trade, such as ice cream and soda fountain merchandise, and paper bags. There are 25,000 square feet of space in the new four story structure, which has been entirely rebuilt and equipped with every modern device in the way of electric elevators and conveyors, and shipping and storing facilities. The business, established in 1900, has grown to such proportions that it was found expedient to acquire the larger home, the present site having been purchased several years ago and was held pending the expiration of the lease of the recently vacated tenants. The proprietors are Eli Resnick, and his son-in-law, J. Neiman. The various lines of stock carried under mill agency in this section are to be carried in larger quantities in the new quarters.

John M. Driver Co. to Build

Ground was broken for the new home of the John M. Driver Company, on the site located on Lancaster Avenue, West of 56th street, recently purchased for the purpose of construction of a plant for the firm's own use in the manufacture of glassine bags, paper specialties and wrappings of high grade stocks. The present home will give way to the new and modern quarters within the next three months. The building is to be of concrete and brick fire proof construction with daylight lighting, and will provide for 20,000 square feet of factory space in the single story plant in the rear, with a two story office frontage. The firm has been engaged in the manufacture of glassine bags, wrappings and specialties for the past five years, and is well equipped with an up-to-date embossing and printing plant, as well as bag factory. The firm now is preparing to manufacture its line of Christmas holly specialties in these products.

D. Lindsay Evans New Association Secretary

D. Lindsay Evans has been appointed Secretary of the Philadelphia Paper Trade Association, the appointment having been made during the week by his uncle, President David Lindsay, Jr., of the association, and a member of the firm of Lindsay Brothers, 419 S. Front street. The newly appointed secretary is associated with the firm of Lindsay Brothers.

Wilder Bros. Improve Shipping Service

Having abandoned the old team service, the firm of Wilder Brothers, coarse paper dealers, 12th and Brown streets, have now entirely turned to motor trucks in the shipping of the various lines of papers dealt in along with waterproof specialties. The latest of the units, a one-ton truck for hurry up calls, will supplement the larger tonnage service of the auto cars used for heavy shipments.

Southern Paper Trade Golf Tourney

RICHMOND, Va., June 5, 1926.—An invitation spring golf tournament is being arranged by the Virginia-Carolina Paper Trade Association, to be held at the Princess Anne Country Club, Virginia Beach, Va., on Thursday and Friday, June 17 and 18. The following program has been arranged:

At Thursday noon all entrants will meet for luncheon at the Monticello Hotel, Norfolk, and leave for the Club immediately thereafter. On Thursday afternoon medal play begins, 18 holes qualifying, to place contestants in flights of eight. Two or four-ball matches may be played. On Thursday evening a get-together dinner is to be held at the Club.

On Friday morning the four lowest scores of the contestants in each division will form the first four-ball match of each flight and the second lowest four will make up the balance of the matches and continue medal play. On Friday afternoon the four lowest scores of morning play in each flight will form the first match of each division, the balance continuing four-ball matches.

There will be prizes awarded to the lowest gross and net scores for Thursday's play, in each flight; a special prize for the lowest gross and lowest net score for the 54 holes of play, and a prize for the lowest score for any 18 holes. Winners of classes and consolation matches can only accept one other prize.

Further particulars may be obtained from Ernest C. Mead, secretary of the Virginia-Carolina Paper Trade Golf Association, care of the Richmond Paper Company, Richmond, Va.

To Be Sales Manager of Tidewater Paperboard Co.

[FROM OUR REGULAR CORRESPONDENT]

NORWICH, Conn., June 2, 1926.—Walter Scott Boyd has been appointed sales manager of the Tidewater Paperboard Company of this city. Mr. Boyd will make his headquarters in Norwich.

UNIFORM ROSIN—UNIFORM SIZE

Nearly every manufacturer is striving to produce uniform products. Lack of uniformity in raw materials is one of the most difficult obstacles to overcome. It is a distinct gain when difficulties from this cause can be reduced in any part of the process.

Such difficulties can be materially reduced in the sizing room by standardizing on Hercules Wood Rosin. It is kept up to specifications, and is made under strict chemical and physical control.

Hercules Wood Rosin is not only clean and uniform, but it has distinctive properties which make it an unusually good sizing agent. It is suitable for all but the white or light-tinted papers.

Our Service Department will gladly be of assistance in demonstrating when and how you may use Hercules Wood Rosin to advantage.

HERCULES POWDER COMPANY
(INCORPORATED)

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LOS ANGELES
LOUISVILLE
NEW YORK CITY
NORRISTOWN, PA.
PITTSBURG, KAN.
PITTSBURGH
POTTSVILLE, PA.
ST. LOUIS
SALT LAKE CITY
SAN FRANCISCO
WILKES-BARRE

New York Trade Jottings

F. C. Ash, vice president of the Oswego Falls Corporation, of Fulton, N. Y., is visiting New York this week.

* * *

Adam Wilkinson, labor commissioner of the American Writing Paper Co., of Holyoke, Mass., is in New York this week.

* * *

G. A. Ware and G. D. Bierce, of the News Print Service Bureau, leave this week for a three weeks business trip in Newfoundland.

* * *

G. D. Bierer, of the News Print Service Bureau, has returned to headquarters after a prolonged tour of the Great Lakes sections.

* * *

Professor C. E. Libby, in charge of the Pulp and Paper Course at Syracuse University, is visiting his friends in New York this week.

* * *

John W. Blodgett, the well known lumber man, of Grand Rapids, Mich., has been visiting many of his friends in the New York paper industry.

* * *

R. S. Kellogg, secretary of the News Print Service Bureau, has been elected president of the Trade Association Executives in New York City, with headquarters at 90 Broadway.

* * *

H. Schrier's Sons, Inc., announce their removal from 1069 Flushing Avenue, Brooklyn, N. Y., to much larger quarters at 1124-1126 Wallabout Market, where they will carry an augmented line of papers and twines.

* * *

Parsons & Petit, selling agents of the Freeport Sulphur Company, of 63 Beaver street, New York, have just issued their annual statistical card on sulphur, pyrites and sulphuric acid, which includes sulphur exports, prices, etc., for 1925.

* * *

With the movement of sulphur out of Galveston showing a tremendous increase over any other year, additional equipment is being added to the plant of the Texas Gulf Sulphur Company at that port. The general offices of the company are located at 41 East 42nd street, New York.

* * *

Howard Jensenius, who during the four years he had been associated with Nilson, Lyon & Co., pulp importers, of New York, had made many friends in the paper industry, has been appointed to the post of manager of the pulp department of Daniel M. Hicks, Inc., of 200 Fifth Avenue, New York, sole agents of Elof Mansson, of Gothenburg, Sweden, in this country.

* * *

Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association, and W. G. MacNaughton, secretary of the Technical Association of the Pulp and Paper Industry, attended a meeting of the Stream Purification Committee, at the Union League Club, Chicago, yesterday, and are attending a luncheon of the Wisconsin Paper manufacturers at Noonah, Wis., today, when association activities are to be discussed.

* * *

Atterbury Brothers, Inc., of 145 Nassau street, New York, announce that Stanley C. Willey has been elected vice-president of the corporation, and that, effective July 1, the business formerly conducted by Nilson, Lyon & Co., pulp importers, of 110 East 42nd Street, New York, will be handled through their organization. Atterbury Brothers will be represented in Gothenburg, Sweden, by John Lyon & Co., and in Oslo, Norway, by Anth. B. Nilsen & Co.

* * *

Under date of June 10, the International Paper Company has issued an interesting four-page leaflet entitled "Strengthening Our Forest Reserves," which is the fifth of a series of leaflets printed this year by the company. The first page tells briefly of the recent acquisitions of additional timber limits by the International, and of the protection of its forest resources against fire. In the center of the leaflet are four airplane views of the Upper Ottawa timber lands recently acquired by the International.

* * *

Carlton Overton, of Castle & Overton, Inc., official delegate of the National Association of Waste Material Dealers to the conference at Brussels on May 18, where the question of sworn weighers' weights and other matters in connection with the importation of rags into the United States were considered, has just returned to the United States and will shortly submit a detailed report as to the discussions that took place at the conference. Mr. Overton's detailed report will be sent to all members known to be interested in the importation of rags.

* * *

President Frankel, of the National Association of Waste Material Dealers, has called a regular stated meeting of the association for Wednesday, June 16, to be held at the Hotel Astor, New York, at 2 p. m. The meeting will be preceded by an informal luncheon at 1 p. m. Members planning to attend the luncheon should make reservations through the secretary. It is understood that at this meeting formal notice will be given in reference to certain proposed changes in the constitution and by-laws, which will be acted upon at a meeting to be held in September. One of these amendments would make it possible to hold the annual meeting, if desired, outside of New York State, and the other would admit as associate members, concerns consuming waste materials in connection with some manufactured product. It is hoped that a good attendance may be had as both matters are of considerable importance. A meeting of the board of directors will be held on the eighth floor, at 11:30 a. m. This meeting will precede the members' luncheon and quarterly meeting of the association on the same day. Directors are urged to be present.

* * *

Additional public financing for the Fort William Paper Company, Ltd., has been undertaken by Peabody, Houghteling & Co., Inc., and Wood, Gundy & Co., Inc., of New York, with the offering of $3,500,000 of first mortgage 6 per cent sinking fund gold bonds, series A, of the paper company. The proceeds of the financing are to be used to retire the outstanding first mortgage 7 per cent serial gold bonds, to complete additions to the plant at Fort William, Ontario, and to purchase $1,000,000 of twenty-year 6 percent collateral trust sinking fund notes of the Fort William Power Company, Ltd., which are to be used as additional security for the bonds. All of the company's common stock is owned by the Fort William Power Company, the stock of which is owned by the Spanish River Pulp and Paper Mills, Ltd., the Mead Investment Company, of Dayton, Ohio, the Industrial Investment Company, of Montreal, Sir Herbert Holt, of Montreal, and associates. The bonds are offered at 98½ and accrued interest, to yield about 6.13 per cent Security for the issues, according to the bankers, consists of a first mortgage on all property now owned or to be acquired by the company, including timber limits, mill site and factories and $1,000,000 of notes of the Fort William Power Company, pledged as collateral.

L. E. Barnes Back From South Sea Islands

PITTSBURGH, Pa., June 6, 1926.—L. E. Barnes, of Huff Barnes & Opie, Inc., paper merchants, has just returned from a trip covering a period of nearly six months to the South Sea Islands—a month or more in New Zealand, nearly two months in Australia and Tasmania. Accompanying Mr. Barnes was his cameraman. They returned with nearly fifteen thousnd feet of movie film—pictures of the natives, their dances, mode of living, etc. These pictures were taken in the Fiji Islands, the Tonga's, Western Samoa, New Hebrides, Solomon, Cook Island, and the Sosiety Islands. They returned directs from Sydney, Australia to San Francisco.

New Plans for Miami & Erie Canal

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, June 8, 1926.—One of the latest plans to be discussed in connection with the Miami & Erie canal, which for many years provided a means of transportation, and water power, for paper mills and other industries along its banks between Piqua and Cincinnati, is its conversion into a modern automobile highway.

This highway would extend from Dayton to Cincinnati, passing through all of the mill centers of the valley, and would supplement the Dixie Highway, now crowded to the danger point with traffic, it is pointed out.

Of course, the project would entail a terrific expenditure—probably millions of dollars in the construction of the paved road, but this fact does not deter its projectors.

At present the Miami & Erie canal from Middletown to Cincinnati, is still used as a feeder for certain industries in the paper City and localities adjacent to Cincinnati, but many business leaders in the two cities mentioned, as well as Dayton, believe the waterway is of better use by changing it to highway purposes.

It is stated that the Dayton-Cincinnati stretch of the Dixie carried the heaviest traffic in the state of Ohio, with the exception of a short stretch running between Cleveland and Canton. "By looking into the future five years," said S. H. Reed of this city, who is at the head of the committee of citizens along the canal route favoring the plan, "and comparing with the increase in traffic during the last five years, one can easily imagine what the traffic situation will be at that time between this city and Cincinnati."

Unusual Accident Proves Fatal

SCHUYLERVILLE, N. Y., June 5, 1926.—An unusual accident which happened recently at the Thomson mill of the United Paperboard Company, resulted fatally for A. S. Lequier. Mr. Lequier died Wednesday night at Glens Falls Hospital. The injury, which proved fatal, was received while he was engaged in unloading paper stock at the Thomson mill. In some manner, the hook which he was using caught in his right leg, severing an artery. First aid treatment was administered at the mill, after which he was taken to the Glens Falls Hospital. Showing considerable improvement after a brief stay at the hospital he was discharged and returned to his home here. His condition later became worse and he was returned to the hospital, where death occurred. The deceased was an old and valued employee of the United Paperboard Company. The survivors are a son and two daughters.

Annual Hudson River Log Drive Starts

GLENS FALLS, N. Y., June 5, 1926.—The annual log drive on the Hudson River has been started and within the next week or two hundreds of thousands of logs are expected to reach Feeder Dam, just above this city. The drive was started at Lindsey Bridge in the Adirondacks, near Newcomb, and is under the direction of Patrick Shaughnessy, of Newcomb.

There has been an unusually large cut of pulpwood in the Adirondacks this season, the total being well over last year. The Schroon River drive was dispensed with this year and most of the pulpwood cut for the Schroon River Pulp and Paper Company, of Warrensburg, is being brought to the mill by rail and truck.

The Hudson River drive started with a force of forty men. The logs for the most part are the cut from the forests of the International Paper Company and the woodlands of Finch, Pruyn & Co.

The Union Bag and Paper Corporation has also launched its drive on the Cedar River, and when the logs now coming down the Hudson reach the mouth of the Cedar they will be joined with the Union Bag and Paper Corporation's timber, and the cut of the International Paper Company, which is being floated down that stream.

Division of Trade Practice Conference

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., June 9, 1926.—The Federal Trade Commission announces the establishment of a new division known as Division of Trade Practice Conference. In this division will be coordinated and facilitated all work incidental to holding conferences with representatives of industries for the purpose of aiding such industries to adopt rules of business conduct looking to the elimination of harmful or unfair trade practices. The new division will be manned by trained employees already on the rolls.

The new division will take over the trade conference work which has been heretofore scattered among several divisions. A number of successful conferences have been held, and a pamphlet covering these conferences has been published and is available for public distribution. As the benefits of these conferences have become better understood, their development and growth made inevitable the formation of the new division. This division will not only extend and enlarge the scope of future conferences, but will also give attention to the operation of rules heretofore adopted

These conferences, which are get together meetings, may be called by the Commission upon its own initiative or by a representative group in any industry. The Commission has found that it not infrequently happens, particularly in highly competitive lines of business, that unfair methods of competition once started have spread rapidly and become generally practiced, and that a situation of this kind can be best handled by a conference rather than by proceeding against individual concerns.

The trade practice conference procedure provides an expeditious and economical means of eliminating such unfair methods which may prevail in an industry, since the industry, under the direction of the Commission assembles and there defines, and on a given date voluntarily and simultaneously abandons the use of such method, thereby putting all competitors on an equal footing. This method also saves the cost of many trials; induces moral support and actual assistance from the industry in the enforcement of the rules adopted; and accomplishes at a minimum of cost and time, one of the chief purposes for which the Commission was created. This extension of the methods of handling trade practices is in accordance with the new policies adopted by the majority of the Commission to adjust and correct trade practices by conferences and agreements rather than by formal complaints wherever it can be done and the interest of the public protected. It is the opinion of the majority that by these methods more cases can be handled and more expeditiously and economically rather than by formal complaints in all cases.

When a trade practice conference is decided upon, a preliminary inquiry is made, the result of which serves as a basis for determination by the Director whether the practices or methods used are unfair to competitors or are against the public interest, and whether the interest of the public is best served by proceeding against individual offenders or by calling a trade practice conference. The Commission is then advised through this division as to the facts and the law, accompanied by a recommendation as to action to be taken with reference thereto. If the Commission determine on a trade practice conference the industry is assembled at a place and time specified, and when the industry has adopted its rules a full report of the Conference, showing those present, the portion of the total industry which they represent, and other essential data is presented to the Commission by the Division of Trade Practice Conferences and if adopted or sanctioned by the Commission, the action of the industry becomes the rule of business conduct for the industry on the subject covered.

The findings by an industry condemning a given business practice is available to the Commission for use as evidence in any proceeding directed to an individual member of the industry who fails or refuses to abide by the rules of conduct laid down by the industry, and who indulges in practices condemned by the industry and by the Commission as unfair. The new division will also furnish a means whereby an agreement once entered into may be kept in effect and better attention given to violations.

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DIRECTORY INFORMATION REQUESTED

Questionnaires are now being sent out for the new edition of LOCKWOOD'S DIRECTORY of the Paper and Allied Trades to be issued in the fall.

All the concerns at present represented in the Directory will receive one of these questionnaires. Many new concerns that have come into existence during the past year also will be sent questionnaires and those concerns who should be listed in the Directory but who do not receive a questionnaire will on application to this office gladly be sent one.

LOCKWOOD'S DIRECTORY filled a distinct need in the paper industry from its first appearance more than fifty years ago and because of changing conditions in the industry its value has greatly increased in recent years. Because of this fact the publishers urge that questionnaires be filled out carefully and accurately by some person in the organization authorized to undertake such work. In the past it has been experienced that in most instances where inaccuracies in the reports have been pointed out, the questionnaires had been made out carelessly and had been answered by some subordinate not authorized or not sufficiently experienced to answer such questions.

Inaccurate or inadequate information may be the means of losing the mill or the concern business. As regards the mill reports especially, this may happen when the paper buyer is seeking special paper of a definite trim. Of course, the buyer using the Directory will not be likely to apply to a mill, the machine trims of which are not given or which in its report does not include among its products the variety of paper required by the paper buyer, although the mill as regards both size and variety may be making just what is being sought.

Judging from numerous inquiries that have been reaching this office for some time past, more specific information is desired by the Directory users regarding just the variety of wrapping paper that is being made by the various mills. It is hoped, therefore, that the wrapping paper manufacturers will bear this fact in mind in filling out their mill reports.

A tendency has been noticed in the past of some concerns to exaggerate the quantity of their productions. This may be accounted for by the fact that over-zealous subordinates, anxious to have their mills make an exceptionally good showing, have filled out the reports. Whatever the explanation, however, this is obviously bad practice and certainly should be discouraged.

The purpose of the various divisions of the Directory seem so apparent that they should be easily understood and in fact are well understood by old time subscribers to the Directory. Lesser experienced persons in the industry, however, still apparently failed to appreciate some rules regarding various sections that have always been followed and that the publishers feel have, in a large measure, been responsible for the prestige of the Directory in this particular field. At the expense, therefore, of repeating what has so often been printed, it is reiterated that only mills having paper making machinery and mills having grinders and digesters are listed in the Pulp and Paper Mill Section, the Classified List simply summarizes the products mentioned in the reports of the pulp and Paper Mills, only converters are mentioned in the Paper Specialties Section and only actual owners of brands and watermarks and not distributors are mentioned in the list of Watermarks and Brands. No exceptions can be made to these rules.

Next to accuracy, the publishers cannot too strongly emphasize the importance of returning the questionnaire as early as possible. Each year it is necessary to address several questionnaires to some concerns before the desired information is obtained. This should not be necessary. It is fair to state, however, that there has been an improvement in this respect recently and it is greatly hoped that this improvement will continue this year.

Fill out the questionnaire accurately and fully and then return it promptly to the Lockwood Trade Journal Company, Inc., 10 East 39th street, New York. This cooperation will be greatly appreciated by the publishers and it will help considerably to insure thoroughly satisfactory listings for those represented in the Directory.

TO FORESTALL EXTENSIVE UNEMPLOYMENT

A plan to forestall periods of extensive unemployment, such as often follow waves of unusual prosperity, has been announced by economists who have been studying the problem of the worker and his job since the industrial crisis of 1921. The plan is presented in the report of a study made under the direction of a committee of the American Statistical Association, of which Mary Van Kleeck, Director of the Russell Sage Foundation's Department of Industrial Studies, is chairman.

The purpose of the plan," the report states, "is to lessen unemployment by providing facts needed to understand and control fluctuations in the production of goods and obstructions to their sale. These interruptions in economic processes throw men and women out of work."

Declaring the unemployment spectre to be "no vague abstraction of economic theory," the report says: "To be out of work and out of wages in an economic world in which the dollar earned is the only means of securing food, clothing, and lodging, overwhelms the worker with a sense of personal failure and discouragement, frustrates his hope of maintaining and raising the standard of living of his family and forces his children to begin wage-earning too early."

The report declares that the distress suffered by large groups of workers periodically thrown out of employment in times of business depression can largely be avoided by accurate advance information on the trend of employment. Such information, if gathered monthly under a comprehensive plan covering the entire nation and classified as to industries as well as geographically would, the report says, enable local governments and welfare agencies to foresee widespread unemployment many months earlier than is at present possible and to initiate municipal improvements and other relief measures before a crisis develops.

The report is an outgrowth of President Harding's Conference on Unemployment in 1921 and of Secretary Hoover's Committee on the Business Cycle. As an illustration of the inadequacy of existing statistics, Miss Van Kleeck, who was a member of both the President's Conference and Secretary Hoover's Committee, points out that the nation's most eminent economists after careful study during the unemployment emergency of 1921 were unable to determine the number of jobless workers more closely than "from 3,500,000 to 5,500,000."

The plan now presented calls for the collection of employment statistics by state labor bureaus, with the United States Department of Labor the coordinating center. In addition, the plan commends and urges the extension of the regular collection of employment statistics by federal bureaus having a direct relation to certain industries, such as the Geological Survey for mines and quarries, the Interstate Commerce Commission for railroads, and the Department of Agriculture for farms, and the reporting of all these data to the Federal Bureau of Labor Statistics for prompt publication of national indices of employment.

Answers to two main questions are sought in the proposed monthly surveys: the total number of employes on each payroll, and the total amount of wages paid in the monthly payroll period. The industries from which it is proposed to collect the data are manufacturing, mining and quarrying, communication, building construction, wholesale trade, retail trade, logging and lumber work, and agriculture.

If the plan advocated is carried out, the committee says, information will be available for business men, bankers, and social agencies which will show each month for every important industry, for every state, and for every important community and industrial area, whether the number on the payrolls and the total wages paid are less or greater than in the preceding month, in the preceding year, and at other periods significant for comparison.

The business failures and suffering among wage-earners in 1921 resulted in directing attention to the possibility of preventing unemployment by lessening the fluctuations in business known as the business cycle, the committee points out. The chief factor in the control of business has been found in the control of credit by the Federal Reserve System.

"Control of credit by the banks and the response of business men, which alone makes control effective, depend upon a fact basis for decisions," the report indicates. "Bankers, manufacturers, and merchants are increasingly using the available facts. Changes in numbers employed reflect changes in activity in business. Changes in total wages, provided the rates of wages have not been altered generally, confirm the evidence of change in activity in business." The report adds that changes in total wages may also be used as a guide to the buying power of the population.

The report points out that employment data, unlike sales statistics or values of products, afford a standard of measurement common to the cotton mill or the automobile factory alike. Likewise, employment statistics afford a basis for comparison between industries.

"This comparison frequently affords a clue to danger," says the report. "If, for instance, they reveal that raw materials are being produced in increasing volume without a corresponding increase in manufactures the danger that manufacturers may be overstocked with basic materials is indicated.

Canada's Exports of Paper Increases

Pulp and paper exports from Canada in the month of April were valued at $10,994,458, according to the report issued by the Canadian Pulp and Paper Association. This represented an increase of $1,270,628 over the value of the exports in April 1925.

Exports of wood pulp in April were valued at $3,163,773 and exports of paper at $7,830,685, as compared with $2,570,270 and $7,153,560 respectively in April, 1925.

Details for the various grades are given below.

	April 1926		April 1925	
	Tons	$	Tons	$
PULP:				
Mechanical	11,882	346,185	11,222	315,183
Sulphite Blchd.	13,303	996,834	12,191	907,626
Sulphite Unbleached	17,654	999,037	13,361	705,995
Sulphate	13,142	821,717	10,531	641,466
	55,981	3,163,773	47,305	2,570,270
PAPER:				
News Print	112,828	7,374,021	93,882	6,654,303
Wrapping	843	96,388	1,097	155,557
Book (cwts)	2,980	25,742	5,776	48,491
Writing (cwts)	962	8,077	276	1,966
All Other		326,457		293,243
		7,830,685		7,153,560

For the first four months of the year there has been a considerable increase in the value of these exports. Total exports of pulp and paper for the four months ending April 30, 1926, were valued at $55,036,460 compared with a total of $48,306,948 for the corresponding months of 1925, an increase for this year of $6,729,476.

Wood pulp exports in the four month's period were valued at $16,665,343 and exports of paper at $38,371,117 compared with $14,093,875 and $34,213,109 respectively in the corresponding period of 1925.

Details are as follows:

	4 months 1926		4 months 1925	
	Tons	$	Tons	$
PULP:				
Mechanical	96,598	2,811,865	83,091	2,448,245
Sulphite Blchd	65,360	5,117,475	61,642	4,512,852
Sulphite Unblchd	92,233	5,227,530	78,359	4,182,593
Sulphate	56,500	3,508,473	47,973	2,950,185
	310,691	16,665,343	271,065	14,093,875
PAPER:				
News Print	540,963	35,689,797	446,804	31,676,848
Wrapping	6,797	885,596	6,428	908,813
Book (cwts)	12,348	112,860	11,958	107,928
Writing (cwts)	5,002	40,154	4,240	37,885
All Other		1,642,710		1,481,635
		38,371,117		34,213,109

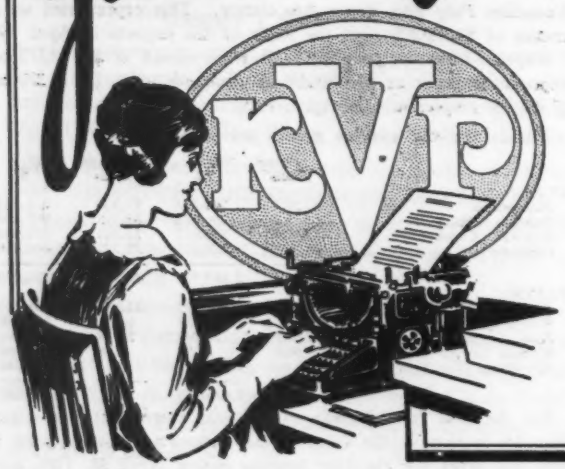
Pulpwood exports were smaller this year than in 1925, the shipments for the first four months being 433,615 cords valued at $3,966,043 as compared with 539,861 cords valued at $5,040,315 exported in the corresponding months of 1925.

Modern Club for Female Paper Makers

[FROM OUR REGULAR CORRESPONDENT]

Castleton, N. Y., June 5, 1926.—"Pointed Firs," the palatial former home of Peter O. Brashear, president of the Fort Orange Paper Company, is now in use as a clubhouse for women employees of the company. The conversion of the property into a modern girls' club has been under way for several months. William Hotaling has been appointed superintendent of the property. Up to date recreational facilities as well as a dormitory and restaurant are provided for the female employees.

Uncle Jake says



The only man who really appreciates a long speech is the man who makes it.

We could occupy this entire page in telling you about the merits of K.V.P. Bond Paper and even then we would not run out of plenty of good, sound logical arguments in its favor.

We have been manufacturing Paper for many years, but we say to you frankly, that the best paper we ever saw or heard of, for all printing purposes is K. V. P. Bond.

Uncle Jake
of the
KALAMAZOO VEGETABLE PARCHMENT CO.
KALAMAZOO, MICHIGAN

LaMotte
H-Ion Roulette Comparator

The Comparator "De Luxe."
Patent Applied For

This set was developed in our own laboratories, to fill the need expressed by many sugar manufacturers and refiners for a portable set, covering an extended range, which would give the maximum of simplicity, accuracy and speed, in making Hydrogen Ion determinations. These requirements are fulfilled in our Roulette Comparator.

The Color Standards, covering the ranges of any three indicators, such as Bromcresol Purple, Bromthymol Blue and Phenol Red, are placed in the revolving drum, the Color Standards alternating with ampoules of distilled water.

The material to be tested is placed in the three test tubes, shown in the block on the front of the set, and measurements made in the usual manner, revolving the drum until a match with the standards is obtained. The pH value is then read off directly.

Set complete with 40 watt Mazda lamp, ground glass and Daylite screen, 3 sets of Color Standards, 27 ampoules of distilled water; together with 3 bottles of indicator solution, 3-0.5 ml. pipettes, and 18 graduated test tubes in a separate case, f. o. b. Baltimore, Md. $75.00

LaMotte Chemical Products Company
McCormick Building Baltimore, Maryland, U.S.A.

Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G.MacNAUGHTON, Secretary

The Passing of the Deckle Strap*

By S. C. Wentz, P. H. Glatfelter Co., Spring Grove, Pa.

The object of the deckle strap is to prevent the pulp from dropping over the edge of the wire.

Deckle straps have been used since Fourdrinier built the first paper machine, and it is hard to convince some people to do without them; I have heard some say, "It can't be done."

Although the deckle straps follow the movement of the wire they are exposed to wear and at the same time take up considerable part of the width of the wire.

Possibly on some grades of paper it might be hard to eliminate them, but our experience has clearly demonstrated that the day of the deckle strap has passed. I will venture to say it can be done on all Fourdrinier paper machines running today with the exception of probably a few of the so-called "specialty" machines.

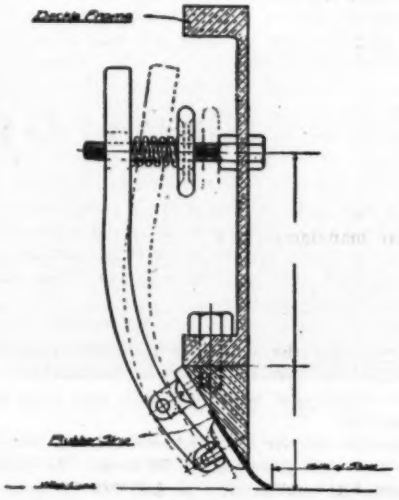


FIG. 1

This design is the form applied to a machine using deckle frames. The only parts required are the triangular shaped bars which are bolted to the lower flange of the deckle frames and from which the clamps are supported.

There is only one unfortunate feature about the device; it is so simple in construction that some mills will avoid buying one of those already perfected and patented, and will try to get up one of their own design.

Every device so far brought forth to eliminate the deckle strap is based on practically the same principle of using an edge ruler against the wire, but each one has a somewhat different application.

The idea of operating a paper machine without deckle straps dates back as far as August 27, 1918, when in the United States

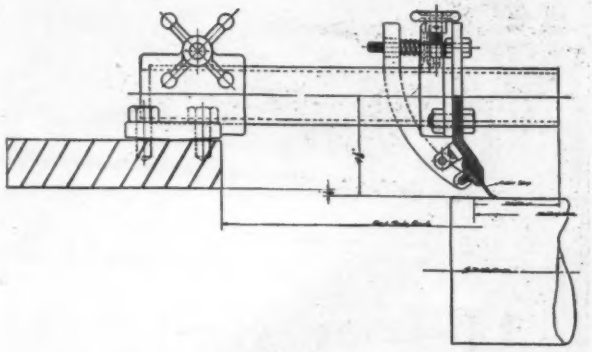


FIG. 2

This design is for use on machine equipped with the Voith or similar stock inlet. As the entire construction is supported from the side rails, it can be adapted to any machine.

there was a patent (No. 1,277,212), taken out by A. H. Gustafsen, Tofte, Norway. This is the first patent issued in the United States on the idea of eliminating the deckle strap. It is more or less the parent or basic patent of all such devices and is controlled by me.

Another method which I am familiar with is the use of a shower pipe and an edge ruler made of rubber. Instead of the shower pipe being on the inside of the edge ruler as the Norwegian's idea had it, this one is placed on the outside and a strong enough shower is used against the bottom of the rubber to hold the stock from flowing out under the rubber strip.

I have not seen any of these installations but only prints of them, and do not know what results are obtained. If a little too much water is used you would be apt to get light edges especially when it is attached to the deckle frames and slices and the head of stock is great and which must be held in with the shower. Consequently more water must be used and the water would splash over the tube roll bearings. Again, if the water is not perfectly clean and filtered, there would be trouble with the shower pipe clogging up, and defeating the purpose of the device.

I have heard of another device which uses air but I am not

TECHNICAL SECTION, PAGE 274

* Abstracted from paper delivered before the annual Convention of the American Pulp and Paper Mill Superintendents' Association, Detroit, Mich., June 1-3, 1926.

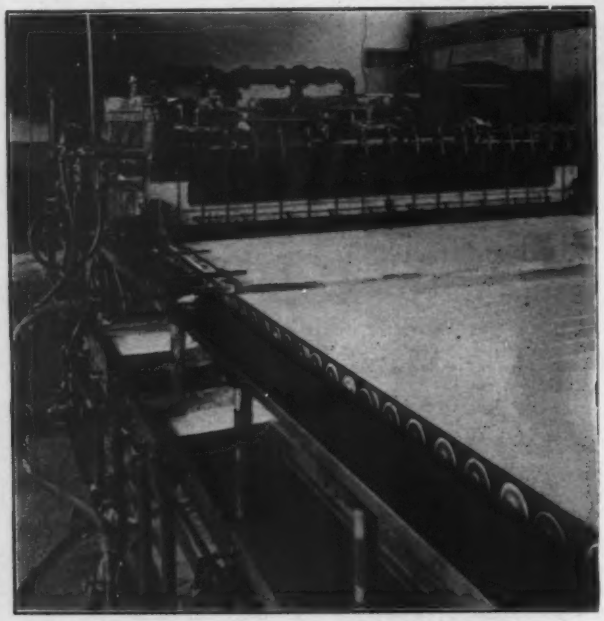
familiar with it, either, and as I have been unable to get any information on it, I do not know what results are obtained.

The one with which I am perfectly familiar is the "Wentz No Deckle Device," manufactured and sold by the Black and Clawson Company, Hamilton, Ohio, and which is assigned to P. H. Glatfelter Company, Spring Grove, Pa.

The Wentz device can be put on any type of Fourdrinier paper machine, using either the old deckle frames or special inlets. It consists of a triangular brass bar and a special clamping device to hold the rubber strip or edge ruler in its proper position to the wire. These triangular brass bars are made in different lengths according to the length of the wire and also the amount of water used on the machine, as well as the condition of the stock, whether free or slow. The rubber strip or edge ruler is held in such a position as to have a tapered effect from the apron to the end of the brass bar. Under the apron and slices it lies on the wire about one inch wide, then tapers down to just merely touching the wire at the other end of the brass bar. This is the position of the strip or edge ruler when used in connection with the old deckle frames.

On old machines equipped with the usual deckle frames and one or two slices, the device is secured to the under part of the deckle frames and extends from the beginning of the deckle frame to five or eight feet beyond. (Fig. 1).

The apron cloth is put on over the edge ruler and thus makes a water tight joint; no water spray is used to assist in forming the edge.



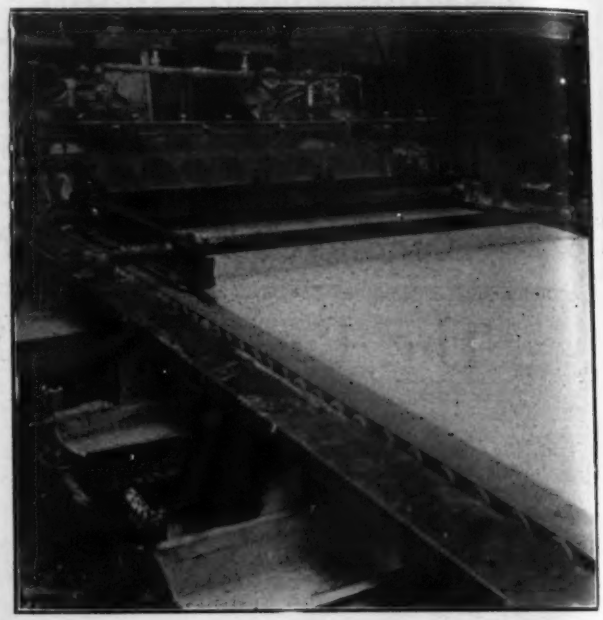
170 INCH BLACK & CLAWSON MACHINE WITH A VOITH INLET AND A WENTZ "NO DECKLE" DEVICE AT PLANT OF P. H. GLATFELTER CO., SPRING GROVE, PA.

The device can be easily applied to old machines. All that is required is the drilling of a few holes in the old deckle frames and no trouble will be experienced in putting it into operation. When so applied it will move in or out for changing deckles the same as when deckle straps were used.

When using the Wentz device in connection with the Voith inlet the rubber and brass bar extend back far enough as to allow the apron of the inlet to rest on the rubber strip or edge ruler. (Fig. 2). In consequence, there is no undue friction caused by a heavy head of stock and water resting on the edge ruler against the wire. When used in connection with these inlets the edge ruler with its brass clamping bars is carried in or out on short brass shafts mounted on supports secured to the side rails. In this case when deckle changes are required the edge ruler is slid in or out by hand on these short shafts.

While it is better to have the edge ruler shake with the wire, this is not absolutely necessary. Quite a number of installations have the edge ruler non-shaking and the wire shaking.

With this device it is possible to get from 2½ to 4 inches more



104 INCH PUSEY AND JONES MACHINE WITH THE OLD DECKLE FRAME AND SLICES AT PLANT OF P. H. GLATFELTER CO., SPRING GROVE, PA.

in the width of the sheet over the machine, resulting in increased tonnage. As an instance I will cite one case on our 170 inch machine wherein it helped us considerably.

With the deckle straps we were not able to get a trimmed sheet wider than 154 inches and run safe. When we received an order for 26 or 39 inch rolls, we were obliged to make a side roll on this run because it was impossible to get 156 inches. With the No Deckle Device we are now able to get 156 inches without difficulty and still have plenty of margin for trimming.

Some of you may not realize the effect of deckle straps on the wire and table rolls. Deckle straps are heavy and are pulled entirely by the wire and furthermore by the edges of the wire only. Since the edges are the weakest part of the wire, the load imposed upon it by the deckle straps becomes a serious factor in the life of the wire.

In addition, the deckle straps are the principal cause of the table rolls wearing down at the edges and when this has taken place the life of the wire is further decreased, until it becomes necessary to replace the table rolls with new ones at a considerable expense.

In four months on our five machines with the deckle straps, our sewing wire time amounted to 78 hours. In four months following with the deckles off, we had but 35 hours' sewing time. This was devoted mostly to repairing breaks in the main body of the wires. There was practically no time spent on sewing the sides where deckle straps ordinarily run, and this reduced our sewing time to less than one-half and we were still getting longer life out of the wires.

Summing it all up, what does the Wentz No Deckle Device mean to the owner of the mill? Briefly stated, the major facts worthy of his consideration are the following:

1. The saving in the cost of wires of from 20 to 50 per cent.
2. The entire elimination of the expense of the deckle strap.
3. The securing of from 3 to 5 per cent. wider sheet over the machine.
4. The time saved in putting on wires.

Cutting Handling Costs with Electrical Trucks*

By Harold J. Payne of the staff of The Society for Electrical Development, Inc.,[1] New York

To regard the handling of material within the plant as a business apart from primary production activities is to make a mistake of the first order. Transportation within and between departments deserves especially thoughtful consideration at a time when the cost of doing this work by the methods that have been used in the past is becoming exceedingly expensive. The pulp and paper manufacturer's dollar now purchases only 41 per cent of the labor that it did in 1914—as applied to handling material by the old manual methods this means that the cost of doing this work has more than doubled in this period.

Material Handling Costs

While no figure is available to indicate exactly what proportion of payroll outlay is required in the paper and pulp industry to cover the cost of material handling a recent survey conducted by the A. C. Nielson Company brought out that the average for all industry amounts to 21 per cent of payroll. It has been estimated that complete mechanism of material handling operations would lower this figure by half. With a present wage outlay in the industry in excess of $150,000,000, the total saving at stake through the introduction of modern equipment and methods is lucrative—the more so at a time when most process operations have very highly developed, thus cutting down on the sources for achieving immediate economies.

An ideal manner of presenting the actual possibilities in this field, from the equipment point of view, would include a discussion of apparatus for hoisting, package handling, loose material conveying and elevating, general hoisting, trackless transportation, industrial rail transportation, special coast storage and handling. Unfortunately the data for such a presentation are lacking.

TRANSPORTING AND STORING LAP PULP

In the absence of the facts on the relative performance of these various types of equipment, it is enlightening to consider what a single type is actually accomplishing on representative jobs that are commonly met in the industry. If those types above mentioned are classified, they may be seen to fall into one of two categories—either fixed or mobile. Functional differentiation indicates that each machine is designed either for vertical movement, horizontal movement or a combined horizontal and vertical movement of material.

The electric industrial truck is mobile, always provides flexible horizontal movement, and in the tiering modifications provides vertical handling to heights of 10 feet. Its range of utility

EQUIPMENT FOR TRIPLE TIERING LARGE ROLLS IN WAREHOUSE

is perhaps greater in plants designed twenty or thirty years ago than in modern plants for the reason that in building at the present time the importance of material handling facilities is appreciated and wherever possible, fixed equipment is installed at the start. There still remains many operations, however, specially in the nature of variable flow between varying points, common to all plants, for which the electric truck is especially well fitted. in general wherever material is moved on wheels by hand, the power truck in one of its several modifications, provides a means of lowering the cost of the operation.

Older plants have to compete with new ones. Often layout adequate for the use of the same handling equipment is not available—and under such conditions a compromise is necessary. For such plants it is much better to apply power as efficiently as possible to handling rather than to pass up the possibilities altogether and to continue to use brawn. I has well been said that the American motor always provides a cheaper means for getting the job done than does the Chinese coolie.

Applications of Electric Trucks

A concrete instance of this point is provided in the practice of a Maine mill in handling logs to grinders. Two high lift trucks proved better fitted for the job of moving logs from pond to a battery of 8 machines—a distance of 150 to 250 feet than an industrial railway that had been used previously. Formerly, it was necessary to unload each car as it was brought in and then to handle the wood again as fed to the grinders. With the present system, rehandling is altogether eliminated by placing skid loads of about 3,500 pounds directly on the grinder platforms. Actually only one electric has to be operated at a time to keep the 8 pocket grinders supplied.

Several mills consider it feasible to move broke baskets with an elevating platform truck and when this operation simply constitutes a part of the machine's routine, it is undoubtedly an economical way of conducting the handling, especially where the broke has to travel a considerable distance to be returned to

* Abstracted from paper presented before the Annual Convention of the American Pulp and Paper Mill Superintendents Association, Detroit, Mich., June 1-3, 1926.

[1] A non profit, non partisan organization having as one of its primary functions the dissemination of authoritative information on the performance and operation of electrical equipment.

process. Both of these applications work out to greater advantage than doing the same work manually but in a modern mill, the fact remains that a beater for converting broke to slush is usually located under the dry end of the machines and the logs are floated directly into the grinder room.

The materials that are readily handled by electric truck include bagged material, baled stock, wet laps, paper in rolls and in flat packages, box shooks, machinery and mill supplies, and in some cases such bulk materials as coal, ashes, stone, etc. Depending upon the type of service, one of five major modifications of the truck is usually employed—the straight platform general utility truck, and low lift truck that carries its load on platform skids; the tiering truck, similar to the low lift except for the fact that it carries its load up to heights of 4 to 10 feet; the crane truck and the tractor.

Any one of these machines can be installed and operated at a total fixed charge, exclusive of the time of the operator that does not exceed $3.50 per 8 hour day. Against this fixed charge—amounting as can be seen to approximately the wage of a single laborer—a saving of from $3,000 to $15,000, is ordinarily made. This means that for each truck placed in service, from 2 to 10 men can be released for other work. The basis for these statements lies in the practice of 12 plants that employ the equipment—equipment representative of every make now on the market.

Beaver Products Co.

The Beaver Products Company, at its Buffalo plant, where paper is converted from rolls to laminated sheets for marketing, uses 6 trucks of the elevating platform type. The daily cost of operating these trucks, aside from the driver's time, interest and depreciation is 0.78. This figure accurately represents the items of power and maintenance.

From 1919 to 1924, 4 trucks were operated 24 hours a day—thus indicating 15 years as the life of such equipment is usually

SHIPMENT OF SHEET PAPER ON SKIDS—TAKING FROM SECOND TIER IN WAREHOUSE AND MOVING TO BOX CAR

determined. These units are still performing satisfactorily so the life obtained up to the present is approximately 17 years.

The work of the trucks begins at the cars where inbound shipments of paper are received. A beam is placed across the top of the car and on each end a chain hoist is attached. The rolls are lifted by fastening the lifting gear to the mandrels, then the extra long platform of the truck is run under and when sufficient clearance has been obtained, the roll is dropped, blocked and carried either directly to the laminating machines or to storage—a distance of from 50 to 200 feet. The rolls weigh from 3,000 to 4,000 pounds. In a day a single truck with driver and helper can unload 90 tons. When this is delivered to storage, an overhead crane is used for piling and when stock is running from storage to laminators, the trucks are loaded with this crane.

From laminating, the stock is moved either to the sizing department or to machines for special impress. In either case the distance is about 175 feet. The handling is made on 4-wheel trucks that were formerly pushed by hand. The interesting feature in the present method is that a truck, assigned to the job, pushes these loaded trucks with power without making any direct hitch or without lifting.

TRANSPORTING AND TIERING SHEET PAPER IN WAREHOUSE

After sizing or impress the board is placed on wooden skids that are extra long for movement to sorting and bundling departments. This haul covers approximately 125 feet. The final handling is to the shipping department—again a distance of 200 feet. For these operations two trucks are in use. The average tonnage handled through the plant runs about 35 tons a day.

Bird & Son

Another plant that has been very successful in using the electric is that of Bird & Son, East Walpole, Mass., makers of roofing products. The product made at the mill where these trucks are used—there are six in the fleet—is finished on the floor below the shipping level. A large amount of it is stored in a warehouse connected by a 150 foot ramp to the shipping platform with a 6 per cent upgrade that has to be traveled by the trucks carrying shingles to storage.

The electrics conduct three jobs. Coating machines are supplied with heavy rolls of stock, the finished product is carried from the cutting machines to storage and thence back to railroad cars for shipment. A better idea of the performance of man gangs were used; one truck with 2 men in the storehouse and 2 in the car. So much idle time resulted because of the length of the necessary run with the truck that it was decided to increase the speed of hauling by adding one additional truck, with one more man in the car to help in unloading the shingles from the skids and piling. It is interesting to note that the installation of trucks did not lessen the number of men on the payroll but that five men with one power truck loaded 415 tons per week with a fraction of the effort that had previously been required to store away 265 tons using 2 hand trucks with 2 men to a truck. In other words, the installation of the electric industrials was part of the provision a single truck may be gained from the fact that in a trial test in 9 hours and 40 minutes, 69 trips were made from the lower level, 300 feet, up one flight by elevator, then 300 feet by the ramp, previously described, to storage, carrying an average load of 4,500 pounds.

Most of the work done is by daily assignment. Usually 2

trucks are in service in the plant proper and 4 are used for loading. To carry on the latter operation, a 7-man gang has been found most effective—consisting of 2 trucks with drivers —with 3 men in the car and 2 in the stock house. Formerly 5- made for increasing production without adding to the number of workers necessary.

It is significant that the men like the power trucks and take pride in keeping them in running trim. Every Saturday afternoon they go over their machines, each man cleaning and lubricating his own truck. A mechanic works with the men at this time making a careful inspection of the equipment and repairing any trucks in the slightest need of such attention.

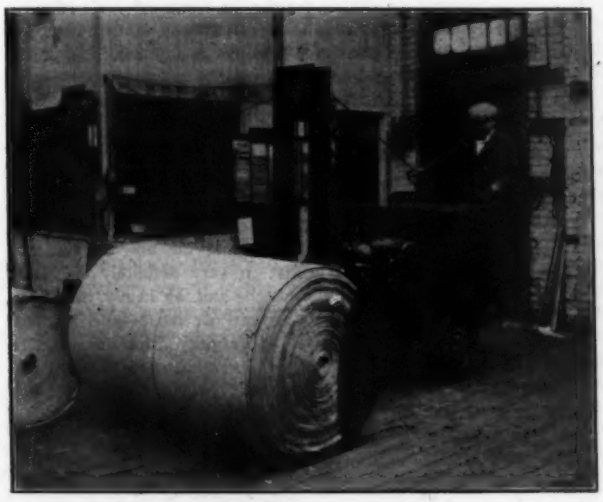
Overhead on the six trucks, including repairs, maintenance, power, depreciation and interest runs about $300 per month or $50 per machine. This works out to an operating cost of approximately 40 per hour. For this outlay the capacity of each of the truckers has been increased from 55 to 83 tons per week. In one day the loading gang handled a 26-car train, each averaging 20 tons.

Other plants might be mentioned that use trucks in the same general manner as do these concerns. There is little point in repetition, however, other than to state that beyond the direct saving in labor that is effected, congestion about elevators is invariably decreased, effective storage area is increased and the safety of works is made more secure. Despite its speed, the electric is definitely under control at all times and in an emergency can stop within its own length.

Paper Shipped on Skids

The paper industry originated the idea of shipping on skids. At the present time there is no longer anything novel in this practice yet there are many concerns which might employ this method to advantage that still load in the old way. Evidence of this point comes most forcibly through a consideration of the potential savings involved.

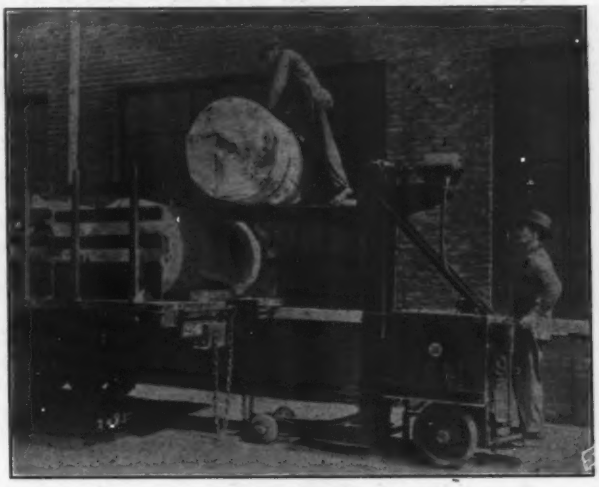
A lithograph concern that is a large user of coated stock now receives all of its paper in this form. Where it formerly required the service of 9 or 10 men for half a day to unload a carload of paper, two men using a high lift electric that runs directly into the car, now do the job in 30 minutes. The management of this concern is so well satisfied that it is negotiating with its own customers for shipping everything from gum wrappers to can labels on skids.



SPECIAL TRUCK FOR MOVING ROLLS AND LOADING ON END IN CAR OR WAREHOUSE

The skids are of the destructible type, knocked together from old lumber, and destroyed as soon as they break. For perhaps four or five trips they are good enough to be returned to the mill. The actual skid cost is almost negligible as compared with a saving in loading cost of from 20 to 50 per cent. Perhaps there is no better proof of the logic of this practice than that practically all of the pulp entering the city of Holyoke now comes in on skids.

Of course it may be held that the skid idea is entirely sound whereas the use of a power truck is not justified. In a few instances this is undoubtedly the case but in general, where hand lift trucks are used for handling a considerable volume of material, it pays to use the electric on long hauls. The ideal combination is to have hand lift trucks located for short shifts, and to let the power truck make the longer transfers. With a capacity of two tons at a speed of from 4 to 6 miles, the electric kept reasonably busy handling skids, readily does as much as 5 to 8 men.



LOADING AND DOUBLE TIERING NEWS PRINT ROLLS ON MOTOR TRUCK

Hummel & Downing Co. and Robt. Gair Co.

Several concerns making extensive use of this combination might be mentioned, including the Hummel & Downing Company, of Milwaukee and the Robert Gair plant at Piedmont, New York. As a matter of fact it seems that most concerns that discover the merits of the hand lift truck are led, as the next step, to the power lift as a means for effecting further cuts.

Both of the concerns mentioned specifically happen to manufacture box board and cartons. At the Hummel & Downing plant about 200 tons of paper are made, laminated, printed and cut, folded, boxed and shipped in a day. Three electrics of the high lift type are used on the two floors occupied by the laminating machines and the other process equipment used for the operations enumerated. The practice of using these machines for handling between operations is followed especially for hauls between process steps that are conducted some distance apart. Each of the power trucks is estimated to save approximately the time of five men.

The Robert Gair plant mentioned uses hand trucks for short hauls, averaging to move 500 pounds at a trip in this way as against an average of from 3,000 to 3,500 pounds when the electrics are used. The oldest of the six units in use at this plant has served eleven years and according to the master mechanic is certain to be good for six more. Floors are rough and runways are narrow but despite these drawbacks the same saving is reported as at the Hummel & Downing plant.

Paper in rolls continues to present a difficult handling problem—especially from storage to car where overhead crane or tram rail equipment cannot be used effectively. The standard lift trucks, both high and low, are of direct use in some plants and the method used by Beaver Board has other applications. In addition several special roll handling trucks are working out successfully. Perhaps the most interesting trucks of the last type are those recently put into service by the Philadelphia

Paper Company—an installation that is ingenious and full of promise.

Philadelphia Paper Co.

Two trucks, each of two tons rated capacity, and with a uniform lifting range of 122 inches are used. Each is equipped with a swivel bearing on its platform and the controllers are so arranged that the lifting mechanism can be operated only when the trucks are in low speed or at rest.

Working in tandem these trucks carry rolls, weighing up to 5 tons, 110 inches long, with a diameter up to 56 inches. The operations include carrying these rolls from machine to storage and back to process in the same building. Two men constitute the entire handling crew and the total cost of the equipment itself runs approximately $6.00 per day.

More storage space was felt to be imperative—a separate building was expensive, and to install an overhead crane in the present building—which involved raising the roof, strengthening the walls as well as purchasing the equipment—involved an outlay of $35,000. The purchase of these trucks, at a fraction of that expenditure, has provided a solution not only eliminating the necessity for tying up this amount of capital but also cutting down very greatly on the amount of labor required to handle the rolls. Tiering two rolls high, or three if need be, is readily possible with the present equipment.

Another roll handling job, conducted by an Ohio Company, involves the use of a truck employing the principle of an ordinary hand truck. This machine picks up a roll of from 1500 to 2000 pounds, tips it into a position for carrying and at destination reverses this operation. A further development of this truck allows picking up rolls from a horizontal position, turning to vertical and reclining to carrying position so that a single operator can do the entire job.

Metropolitan Life Insurance Co.

Three trucks of the tiering type are used at the printing plant of the Metropolitan Life Insurance Company, Long Island City, N. Y. To eliminate rehandling, about 50 wooden skids are used. Although 12 tons represent the daily output of the plant a large number of handlings are involved—not less than 10 to be exact.

Work in the shop is stored entirely in this form. Slack between successive operations is thus provided. A conspicuous saving effected in that soiled or damaged work is cut to a negligible quantity. Although it cannot be directly estimated, the very definite saving made in the time of press-men and other skilled workers by having material always on hand and ready to use when required runs high. Another advantage discovered in the use of the power trucks has been the elimination of the heavy and often dangerous work involved when paper in large rolls or heavy packages is handled by hand.

It is impossible to outline the average day's work for any one of the three machines. Their outline includes carrying incoming supplies of paper in flat packages, cases or rolls to storage, and as required to the presses. They also carry finished signatures from press room to bindery and finished work from the bindery to the packaging or shipping departments, or to storage. A special box or crate skid is used for carrying the signatures. Hardly a day goes by that some unusual job does not crop up for which the trucks prove their fitness. Recently, for instance, the machinery in one section of the floor had to be removed to another floor. The trucks were pressed into this service and did the job satisfactorily. Surprisingly narrow aisles are traveled without difficulty, and congested quarters have few points that are inaccessible to the power trucks.

For handling baled material, any one of the lift trucks can be used to advantage. One concern that has to transport cordage put straight platform trucks into service thirteen years ago for this operation—a haul of 900 feet from dock to warehouse up a 1½ per cent grade. The average load consisted of bales weighing 3200 pounds. A trial demonstrated that nine men could be released by a single machine. Because of the economy realized, a fleet of 14 trucks of similar design has been built up for this service. If the wages of a stevedore are reckoned at $1,500 a year, the annual saving amounts to $189,000. During 1924, on this haul, freight was transferred by these trucks at an average cost of 40 cents per ton, including all labor and truck charges.

A. P. W. Paper Co.

The A. P. W. Paper Company handles bales of pulp from storage to beaters by using a straight platform truck along with trailers for which the load carrier acts also as a tractor. In this operation, which has been conducted since 1914, a saving of 14 men has been realized. This same company, by the way, uses an elevating platform truck with skids in the finishing plant, and for shipping, thereby saving 7 workers.

In the service of the mill-wright gang, the crane truck is especially useful. One concern that has enough work to keep such a machine going steadily states that it has decreased the number of men required for maintenance by 35. Undoubtedly this figure is higher than could be hoped for in the majority of plants but where a considerable amount of heavy handling of apparatus has to be conducted throughout the mill, this type of machine is very well fitted. Another application of the portable crane truck that has been successful is in supplementing the service rendered by overhead handling equipment when production rises to the point where greater capacity is necessary.

Detroit Sulphite Pulp & Paper Co.

Numerous odd jobs fall to the lot of the electric industrial. Cars are spotted in the absence of a switcher by using the truck as a locomotive; a concern that placed tanks for handling oil and lubricants to all parts of the plant saved 60 man hours a day by the expedient; dump bodies used for handling waste increase the wheel barrow pusher's capacity by ten times; the Detroit Sulphite Pulp & Paper Company solved its ash handling problem by putting an electric tractor on flange wheels and moving cars from below the grates to an ash dump; another company that formerly kept a man busy 9 hours a day handling starch from storage to mixing department, now moves the entire supply in one or two trips with the power truck that hauls most of the load on a trailer.

Finally, to summarize, the electric industrial is a flexible unit, capable of performing advantageously in by far the larger number of operations dependent upon moving material on wheels. It tends to conserve space thereby decreasing congestion; it increases general efficiency by insuring that the flow of material will be adequate to process needs; it very definitely decreases labor turnover by taking the backache out of heavy handling; it saves from $3,000 to $10,000 a year—or more—and last but not least it gives workers time, opportunity, and incentive to think—always conducive to better operation. As the Waste Committee of TAPPI has pointed out:

"A marked advance in the mechanical handling of materials has been made in the past ten years. This mechanical development will doubtless continue not only because of the reduction in costs and the lessening of labor but also to eliminate the wasteful use of human energy where it is possible to do the same work as economically by mechanical means. Human energy, in the last analysis, expresses itself in thinking and it is unintelligent to put it to use where its accomplishment is mainly measured in foot pounds."

Acknowledgment

In the development of this outline, invaluable assistance has been rendered by many men in the industry who have made special study of the materials handling problems of particular plants. This list includes C. W. Weis, Jr., Stecher Lithograph Company, Rochester, N. Y.; E. P. Kogler, Beaver Products Company, Buffalo, N. Y.; G. W. Piper, Robert Gair Company, Pier-

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mont, N. Y.; R. T. Anderson, Paterson Parchment Paper Company, Passaic, N. J.; J. S. Clemmons, Hummel & Downing Company, Milwaukee, Wisc.; E. T. A. Coughlin, New Jersey Coated Paper Company, Montclair, N. J.; E. Chamberlain, Bird & Son Company, East Walpole, Mass.; L. Strattner, West Virginia Pulp & Paper Co., Mechanicville, N. Y.; Paul Zilske, Detroit Sulphite and Paper Company, Detroit, Mich.; and E. Lawlor, Printing Division, Metropolitan Life Insurance Company, Long Island City, N. Y.

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Methods of Deinking Old Papers*

By Alfred Bryant, Bryant Paper Co., Kalamazoo, Mich.

From the very beginning of the use of old papers as a source of raw stock in the manufacture of book paper and other grades there has been a constant striving for some better and more economical method of cooking and deinking old papers.

I will endeavor to describe, as briefly as possible, several old as well as newer systems. I will touch only briefly on the sorting of the old papers. As you know, this is done principally to see that papers containing any traces of ground wood, high colors and book backs, etc., are kept out of the cooker. I am assuming that graded papers are being used, although I know of some mills which have no sorting room, their papers being bought practically free from ground pulp.

Open Tanks

One of the earlier methods (and still being used) is, as so many of you know, the use of a circular tank with a percolator spout in the center. On the bottom of the tank is a spider and false bottom, this being perforated sheet metal or cast iron. The tank is partly filled with soda ash liquor, which is heated with live steam until it begins to percolate up through the hollow spout and spray over the entire area of the tank. The paper is thrown into the tank until full, after which the steam is regulated to keep liquor constantly spraying over the papers for a given number of hours. The false bottom with the contents is then raised and the papers allowed to drain, after which they are forked off by hand into cars. These cars are then pushed to the washers and the contents, of course, have to be handled again.

This method has many drawbacks, both in cooking and washing. Among many, the fact that it is very easy to fill the cooker so that it is impossible to get the soda ash liquor to all parts of the pack. This results in uncooked paper which in the finished paper means discolored parts and sometimes many of the original printed letters appear in the sheet.

The sloppy and messy condition of the floors is disagreeable to the workers and is also a constant source of much dirt in the paper.

Rotaries

The next important development in cooking was the use of the rotary and globe cookers. These have proved to be advantageous in many ways over the open vomiting tank. The preparation of the papers going to the rotary was similar in every way, but from there on differed considerably

After the papers and necessary amount of water and soda ash are put in, the heads are fastened down and steam turned on. The pressure of steam used and length of time of cooking varies in almost every mill—15 to 75 pounds—as also did the amount of soda ash used.

The advantages in the rotary method were due to the fact of a constantly moving mass of paper and liquor. This set up an agitation and defibering action, caused by the rubbing of the paper against the sides of the rotary and other paper. This naturally did away with dry paper and also defibered the stock in a very efficient manner. It also permitted a very great reduction in the amount of soda ash necessary to do the work of cutting the inks, colors and sizing in the old papers.

One thing is sure, however. If you expect to get the best results in this way of cooking—and for that matter, any method of cooking—you must use definite amounts of stock, water and soda ash. You cannot have 5 percent today, 8 percent tomorrow and 3 percent the day after and expect to get uniformly good results. In fact, what is brewing for anyone who does so, is trouble, and lots of it.

The length of cooking time will necessarily vary with the kind of paper used. You will find ledgers are much more difficult to cook than book and magazine papers.

One very decided advantage of the rotary system is the low percentage of soda ash necessary to do the work. In my opinion, it is possible to cook with as low as 1 percent soda ash, but do feel this is treading on dangerous ground and would not advocate going as low as this amount.

The use of rotaries makes it possible to do away with very much laborious work, as from the time the old paper goes into the rotary it is not touched by anyone, pumps doing all the work formerly done by hand, eliminating dirt and a very unsightly mill.

Other Methods

As you all know, cooking in a rotary or globe cooker means very high density stock, running as high as 50 percent. The advisability of this high consistency was later challenged by some who were advocates of very low consistency cooking. This brought into use several systems, such as, for instance, Winestock, which is essentially circulation at high speed with a pump connected to the cooking tank Also the Billingham method, which was the use of two pumps tied into the cooking tank and discharging the stock in two opposing streams, each stream of stock striking the other, thereby defibering by impact of fibers against each other.

Cooking in a closed heater where the roll does the work of circulating and defibering with high pressure steam to bring the stock to desired temperature. This method gives plenty of possibilities for uncooked stock as it is easy for stock to lie on the bottom of heater—at least beaters of the old type. The use of the paddle is hardly possible to help owing to the steam coming from the hot stock. The result is often uncooked papers.

Continuous Deinking

In the East there are some mills cooking by what might be termed "High density, low pressure methods." The paper is fed into a series of tanks (horizontal) with inclined bottoms. The stock is slowly dragged forward, mechanically, and finally passes through two press rolls which squeeze out most of the liquor. This means a small loss of liquor, additional being added to maintain a constant level in the cooking tanks. Afterwards the stock is defibered and then washed in a series of decker type washers. This method seems to give a very fine color when

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* Abstracted from paper presented before the Annual Convention of the American Pulp and Paper Mill Superintendents Association, Detroit, Mich., June 1-3, 1926.

washed. In fact, as regards the color of stock obtained by this method, it would be very difficult to beat.

A very recent system is one whereby a Shartle beater pulps the old papers, using hot water in the beater at a temperature of about 160 deg. fahr., then passing the stock continuously from the beater into very large horizontal cooking tanks, these tanks having agitators. Each tank is hooked up to a high speed centrifugal pump. This being used to defiber and circulate stock to bring about a quicker cooking action.

This is practically a continuous system as the stock is passed over the decked washers as fast as it is cooked.

It would seem to me the whole secret of cooking in this low density method is positive circulation of all the stock. There must not be any "dead spots," because if there are, when you pump over to the chest there will certainly be uncooked papers. Design of cooking tank, methods of agitation and circulation, and the right temperature of cooking, have everything to do with the success of this system.

The soda ash costs will not be as low as with the rotaries, but the labor costs are very much lower. Furthermore, there is no dirty cooking room, no steamy condensing moisture or any of the many objectionable features that all of the other systems have in one way or another. In addition to these advantages it is possible to bleach with a very low percentage of bleach and a very low consumption of water to wash, per ton of stock.

Another decided advantage in this method of cooking and washing is that it makes it much simpler to put in a type of save-all that will prevent waste. Using the old type hollander washer it was very difficult to handle the effluent, as it was always a varying proposition. First it was very dirty, then gradually getting less and less discolored. Then the rewash after bleaching was impossible to use. So it meant a system of piping and valves that was both costly and complicated. The effluent from the decker system of washing is constant and unvarying, which simplifies the save-all problem very much.

There is no doubt whatever in my mind that on account of the constantly decreasing sources of raw materials for paper, conversion mills, such as we represent, will become more necessary than ever in the future. Waste must be eliminated and when we can take one pound of old paper and get nearest to one pound of new paper from it, we will have done a very great deal towards elimination of waste and also produce paper that can be used for many purposes, thereby reducing the cost of all papers.

It is vitally important that we constantly strive for better methods of conversion because what is considered good today, may be—and in all probability will be—obsolete tomorrow.

Mechanical Treatment of Paper Stock

SPECIAL INQUIRY NO. 50

For the Heat, Light and Power Committee, in the compilation of power used on papermaking machinery as well as in making preparation for a new Committee on Beating which the Executive Committee of TAPPI hopes to form during the year, it is desired to get the preliminary data of the present practice of preparing stock for the broad classes of papers according to the relative degree of treatment required.

The classes of paper are arranged as follows:

1. Greaseproof and glassine papers.
2. Rope papers.
3. Fine papers—rag and sulphite.
4. Kraft papers.
5. Sulphite wrapping and bag papers.
6. Tissue papers—toilet tissue and fruit wrap.
7. Container board.
8. Chip board.
9. Book papers.
10. Roofing papers—(rags).
11. Hanging, catalog and special news.
12. Newsprint paper.

Although not quite correct, it will be taken for granted for the survey that the condition of the fiber used and the degree of treatment to produce the grade of paper are the same in each class. The purpose of the survey is to show in general the differences in practice as to plant equipment used and the power consumption.

The mechanical treatment includes the use of beaters and refiners. In the case of rope, rags and waste papers, the operation would begin with the halfstuff produced by the use of breakers, breaker beaters, defiberers or pulpers. The equipment for this purpose and the power required are considered separately.

Where a number of the classes of paper are made in a mill, on which data is available, they should be reported individually.

As there is known to be a very wide difference in practice in different mills it is hoped that as full information as possible will be supplied.

From the responses a Special Report will be prepared omitting the name of the mill but covering each class of paper and a copy will be sent to those who supply the information. As the value of the report will depend largely on the amount of data supplied, it is hoped that a wide response will be received.

The data sheets should be sent as soon as possible as the tentative final date is set at July 15.—W. G. MACNAUGHTON Secretary TAPPI.

DATA SHEET

MILL

GRADE OF PAPER

FURNISH

TONNAGE of paper machine per 24 hours

DEFIBERING

Material (rope, rags, old papers)
Tonnage per day

Cutter

Type
Power installed Power used for cutter—hp. or kw.

Breaker or Broke Beater Equipment

No. (rags, rope or machine broke)
Type
Capacity each (indicate if continuous)
Production—tons 24 hr.
Power installed, each Power used, each
Method of measuring power (wattmeter, engine indicator, estimated) Hp.-hr. or kw.-hr. per ton
If pulper, kollergang, pebble mill, rod mill or jordan is used, please give similar data.

BEATING

No. beaters (except broke beaters)
Type
Capacity each—lb. air dry (10 percent moisture)
Density of stock in beaters—per cent
Installed power to drive beaters per paper machine—hp.
Power used per beater—hp. or kw.
Method of control (freeness test, wattmeter, beater drag, etc.) estimated) Hp.-hr. or kw.-hr. per ton used on beaters
Method of control (freeness test, wattmeter, beater drag, eac.)

REFINING

No. jordans or refiners (except broke jordan).
Type
Size
Density control if used
Installed power to drive refiners—hp.
Power used per refiner—hp. or kw.
Method of measuring power (wattmeter, engine indicator, estimated) Hp.-hr. or kw.-hr. per ton on refiners.
Total hp.-hr. or kw.-hr. per ton installed power
Total hp.-hr. or kw.-hr. per ton used

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

Clarence J. West, Chairman

Device for Cleaning Paper Machine Wires. W. J. Dolan, U. S. pat. 1,550,304, Aug. 18, 1925. A steam nozzle and a water nozzle are placed side by side over the lower stretch of the wire at a point near the breast roll, and the two nozzles can travel back and forth across the width of the wire.—A. P.—C.

Felt-Reconditioning Apparatus. F. W. Vickery, assignor to Vickery Ltd. U. S. pats. 1,548,073, Aug. 4, 1,550,993 and 1,550,994, Aug. 25, 1925. No. 1,548,073 covers the method of cleaning or reconditioning a paper machine wet felt which consists in forcing a jet of hot fluid through the felt while it is running on the machine and moving the jet across the width of the felt a distance not greater than its width during one complete travel of the felt around the presses and rolls. At the same time air is forced through the felt to cause the fluid to return back through the felt around the presses and rolls. No. 1,550,993 provides a nozzle for delivering hot fluid under pressure against the surface of the felt, and a suction port on either side of the nozzle. The mechanism is made to travel across the width of the felt while the latter is in operation on the paper machine, so that it covers a distance approximately not greater than the distance across the fluid nozzle while the felt travels through its entire length. According to No. 1,550,994 the nozzle for forcing the hot fluid through felt is stationary and extends across the full width of the felt, as do also the suction ports on either side of the nozzle. The fluid under pressure is turned on intermittently, and also the suction.—A. P.-C.

Systematic Examination of a Paper Machine Suction Box. Paper Trade J. 81, No. 11, 51-52 (Sept. 10, 1925). The method which is described consists essentially in checking up first the suction apparatus (siphon or pump) and then the box itself. —A. P.—C.

Paper Machine Flow-Box. A. N. Russell. U. S. pat. 1,534,080, April 21, 1925. A deflecting member is provided at the delivery end of the flow box and extending right across it. The member is adjustable vertically, and also about its horizontal axis; and it is so positioned and formed that it makes two nozzles or passages, one between the deflector and bottom and the other between the deflector and front of the flow box. The flow of stock is divided into two streams, one passing over and the other under the deflector; and the two streams flow into each other just before being delivered on to the wire. This results in thorough mixing of the stock, and uniform distribution over the wire.—A. P.—C.

Preventing the Formation of Froth on Paper Machines. W. E. Metcalf, assignor to Process Engineers, Inc. U. S. pat. 1,532,597, April 7, 1925. The stock passes from the screens to a flow box which carries it to a central box; and from there it is pumped to the head box in which it is delivered by means of a submerged, horizontal pipe perforated so as to discharge the rapidly flowing stock in various directions. The individual fibers are thus kept in motion when they reach the wire, and there is no trouble in getting a proper formation of fibers without using any shake.—A. P.—C.

Feed Box for Fourdrinier Machines. W. Voith. Eng. pat. 235,864. The bottom of the feed box is arranged in the same plane as the wire on to which the stock is fed, so that the flow of the lowest stratum of stock from the tank on to the wire is horizontal, and a perfectly even web of good surface is produced.—A. P.—C.

Suction Couch Roll for Paper Machines. C. Seybold and J. Bolters dorf. Fr. pat. 591,687, Jan. 15, 1925. The roll is divided into a number of compartments or cells which are successively connected to the source of vacuum. These compartments are open at the outside and are closed by the portion of the machine wire which passes around the roll. This eliminates wear both of the wire and of the roll.—A. P.—C.

Process and Apparatus for Removing Air and Water from the Web on the Paper Machine Wire. V. Antoine. Fr. pat. 591,799, Jan. 21, 1925. The upper couch roll is set back from the lower one, so as to exert some pressure on the wire; and under the roll a suitable number of rubber blades, brushes, or similar rolling devices, are provided to scrape off and remove the water which has been forced through the wire by the pressure of the top couch roll. This effect of the brushes can be enhanced by constructing the brush support to act as a suction box.—A. P.—C.

Watermarking Apparatus. F. P. Klund and H. F. Obermanns assignors to Hammermill Paper Co. U. S. pat. 1,530,677, March 24, 1925. The watermarking device consists essentially of a number of small marking rolls supported from a common transverse shaft in such a manner that their position and presure against the press roll can be adjusted. The device is mounted to act against the upper roll of one of the presses other than the last press, the paper being carried up around the press roll sufficiently for the marking rolls to act on the under, or wire, side of the sheet.—A. P.—C.

Journal or Winder Shaft for Paper Machines. B. Larson. U. S. pat. 1,530,003, March 17, 1925. This is an improvement to the expansible shaft described in U. S. pat. 1,033,423. Stop blocks are provided inside the two segment pieces forming the body of the shaft, for the purpose of limiting movement of the segments under the influence of the spring to the point at which they are spaced apart the greatest distance possible, thus insuring that normally the shaft will be maintained at the proper size for use. At one end of each segment is a trunnion with a circular flange, the diameter of one of the flanges being equal to that of the contracted shaft and the diameter of the other flange being equal to that of the expanded shaft.—A. P.—C.

Doctor for Calender Rolls. F. W. Vickery assignor to Vickery Ltd., U. S. pat. 1,552,363, Sept. 1, 1925. The doctor consists of a longitudinally bendable blade having an edge pressing against the calender roll. A width of resilient metal connects the blade with a supporting member parallel to the roll, but permitting the blade to bend lengthwise and to adjust itself longitudinally in accordance with the bending.—A. P.—C.

Paper Cutter. A. Bataille. Fr. pat. 591,600, Dec. 17, 1925. The invention provides for the interposition of a plane or spherical epicycloibal train in the transmission, which permits of stopping the clamp at any point of its path according to the height of the pile of paper to be cut, of obtaining the proper pressure on the paper, and of maintaining this pressure during the whole of the cutting stroke of the knife.—A. P.—C.

Winding and Unwinding Webs. A. R. Winpenny. Eng. pat. 235,648. In this machine for winding and unwinding webs the main cylinder, which is driven directly, and the secondary cylinder, which is driven frictionally, are arranged at the same level on the machine bed. The reels are each mounted on a carriage of the fluid cylinder operated type. A hand-wheel-controlled jockey wheel enables the friction in the gearing between the two cylinders to be varied to lessen or increase drag or tensioning.—A. P.—C.

Collar for Paper Machine Winder Shafts. J. N. LaMar.

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U. S. pat. 1,550,173, Aug. 18, 1925. The collar comprises a plate with a central opening through which the shaft passes. Curved jaws are pivoted to the plate and around the opening of the plate. A spring surrounds the jaws and bears against them so as to urge the jaws inwardly into contact with the shaft. Between the free ends of the jaws is a cam, by rotation of which the free ends of the jaws can be separated.—A. P.—C.

Combined Gumming and Cutting Apparatus for Paper. L. Chambon. U. S. pat. 1,555,238. Sept. 29, 1925. The machine comprises means for applying spaced longitudinal strips of gum on the paper, drying the gummed paper, and then slitting it along the center line of each strip of gum and winding up the resultant paper strips. Each of the finished strips thus has a narrow gummed strip along each edge.—A. P.—C.

A Cutter for Paper. Firma O. C. Strecker. Ger. pat. 417,871 Papierfabr. 23, 601 (Sept. 13, 1925). Description is given of an improved cutter for uniformly traveling sheets of paper.—J. L. P.

Paper-Reinforcing Machine. C. H. Howard assignor to Paper Products Machine Co. U. S. pat. 1,551,992, Sept. 1, 1925. Adhesive is applied to one side of a paper web to which is subsequently promiscuously applied thread cut into suitable lengths. Other threads are applied under tension lengthwise of the paper web. Another sheet of paper is then applied to the re-enforced web and put through a press.—A. P.—C.

Multiplex Fourdrinier Paper Machine. U. S. pat. 1,554,426. Sept. 22, 1925. Two or more fourdriniers are mounted one above another, and the webs formed on the different wires are brought together at the first press.—A. P.—C.

Process and Machine for Making Pulp Containers and Other Articles. H. Buel. U. S. Pat. 1,549,903, Aug. 18, 1925. The liquid pulp suspension is forced into the mold under pressure. When the supply of pulp is cut off an inert gas, such as nitrogen, neon or carbon dioxide, is forced into the mold to force out the remaining liquid; and finally the article is dried in the mold by forcing a hot inert gas through it.—A. P.—C.

Process of Making Friction Facings. I. J. Novak assignor to The Raybestos Co. U. S. pat. 1,551,045, Aug. 25, 1925. Asbestos is made into a sheet on a paper machine, the sheet is calendered to a predetermined thickness, friction elements are formed from the sheet, saturated with a topped crude having an asphaltic base, and heat treated to harden the binder.—A. P.—C.

Speed Reducers—Their Advantages and Applications in the Paper Industry. J. H. Shays, Jr. Paper Trade J. 81, No. 16, 51-53 (Oct. 15, 1925). Paper Mill 49, No. 42, 24-26 (Oct. 17, 1925). A brief discussion of their merits.—A. P.—C.

Electrical Maintenance in Pulp and Paper Mills. W. W. Cronkhite. Paper Mill 49, No. 42, 41-44 (Oct. 17, 1925). Paper Trade J. 81, No. 17, 49-51 (Oct. 22, 1925). A discussion of prop r maintenance of electrical equipment with a view to obtaining maximum service and efficiency without undue trouble and expense.—A. P.—C.

Electric Pumping in Paper Mills. R. H. Rogers. Paper Mill 49, No. 42, 37-38 (Oct. 17, 1925). Paper Trade J. 81, No. 17, 54-55 (Oct. 22, 1925). Brief general discussion of the essentials of good mill pumping, which are: continuity of pumping service, minimum Kv-a hours for pumping per ton of mill product, least possible man-hours and materials for maintenance of the pumping service. The five elements in the pumping system responsive to engineering attention are piping, pump, motor, wiring and control. These are discussed in turn.—A. P.—C.

Possible Improvements in Stock Pumps. A. Lambrette. Papeterie 47, 414-418 (May 10); 470-476 (May 25, 1925). A discussion of the effects of the presence of paper stock in the operation of centrifugal pumps, and of the types best suited for handling paper stock. The merits of the Archimedes' screw and of the spiral pump are discussed.—A. P.—C.

Raw Materials

Woods From French West Africa ("Emien," Alstonia Congensis, Engl.) F. Heim, M. Cercelet, J. Maheu, G. S. Dagand and R. Heim de Balsac. Bull. Agence Gen. Colonies 17,1377 (1924); Budl. Imp. Inst. 23, 367-368 (1925). A sample of "Emien" from Ivory Coast, having 8.25 per cent water, showed (on dry basis): ash 0.91 per cent, fats and waxes 0.63 per cent, cellulose 64.3 per cent lignone 34.16 per cent. Cooking 8 hrs. under a pressure of 3 kiles with caustic soda solution at a concentration of 5.5 per cent, gave a brownish yellow pulp, which bleached white with average facility, yielding 33 per cent (on dry basis) of bleached pulp. The pulp consists almost entirely of marrow-ended cylindrical fibers, with very thin walls and very wide lumen, 1.0-1.5 mm. long (average 1.2 mm.), 0.025 to 0.035 mm. (average 0.030 mm.) in diameter, and with a felting power (diameter: length) of 0.025. The pulp gives paper of similar quality to ordinary wood pulp papers.—A. P.-C.

Bald Cypress (Taxodium Distichum) Pulp. L. Vidal. Papier 28, 985-988 (Sept. 1925). Results are given of a detailed micrographic examination of the sample included in H. E. Surface's Bulletin on "Paper Pulps from Various Forest Woods; Experimental Data and Specimens of Soda and Sulphite Pulps" (Washington, 1912). The sample in question was very noticeably undercooked and contained many shives and incompletely separated fiber bundles. A sample prepared in the laboratory from a tree growing at Grenoble (France) seemed of better quality and appeared noticeably stronger. The author concludes that, though not as good as spruce pulp, bald cypress pulp is of some value and could doubtless be used instead of spruce in many cases.—A. P.-C.

French Colonial Cellulosic Fibers. A. Thiriet. Chimie Et Industrie Special No., 498-507 (Sept., 1925). A review of the paper making qualities of the more important French colonial fibers.—A. P.-C.

Sorghum From Madagascar. F. Heim de Balsac, J. Maheu and M. Cercelet. Bull. Agence Gen. Colonies 18,360 (1925); Bull. Imp. Inst. 23.366 (1925). Fragments of stalks received under the name of "Bakaka," a form of *Sorghum Vulgare*, Pers., containing 9.59 per cent water, showed (on dry basis): ash 6.22 per cent, cellulose 82.83 per cent, lignone 10.05 per cent. Cooking 7 hrs. under pressure (not given) with a 5 per cent caustic soda solution gave a yellowish-brown, very easy bleaching pulp. The yield of bleached pulp was 37 per cent. Microscopical examination showed the pulp to be composed of fibers, fragments of vessels and a rather large proportion of cellular matter. The fibers were of two kinds: (1) fine fibers, 3-6 mm. long and 0.10 to 0.015 mm. wide, which were remarkably regular, sharply pointed and had a very narrow lumen (sometimes absent,) and (2) coarse fibers, about 5 mm. long and 0.030 to 0.035 mm. in diameter, which were fairly abundant and had a variable lumen. The felting power was 0.005. Paper made from the bleached pulp was dull white, soft to the touch, and had a fair rattle; in general it was of good quality but a little lacking in suppleness.—A. P.-C.

Paper and Pulp From Beech Wood. Anon. Zellstoff U. Papier, 5,401 (Oct. 1925). Beech wood yields a superior sheet and a pulp which is softer than that from spruce wood. Beech pulp is used in the manufacture of artificial silk, explosives, and celluloid. As a by-product of the digestion process, nitrogenous substance is available for fertilizer purposes.—J. L. P.

Roots of the Licorice Tree as Raw Material for Paper. Anon. Zellstoff U. Papier, 5, 400, (Oct. 1925). The licortce tree (Glycyzkiza glaudulifera uralensis) grows abundantly in Turkestan and its roots contain about 20 per cent licorice, of which 18-19 per cent is extracted. The extracted residue is cooked 4 hrs. in an autoclave with 15 per cent lime or 5 per cent sodium hydroxide at 3 atmospheres pressure. After washing and disintegrating the resulting pulp, it is converted to fibers not unlike esparto, 3-4 mm. long and 0.015 mm. thick. The yield of paper stock based on the dry wood was about 50 per cent. Paper made in this way appeared suitable for packing purposes. Physical tests on hand-made sheets yielded a tearing length of 1050-2040 m., per cent stretch 2.7-6.5, and a folding endurance 5-16. —J. L. P.

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Section of the

COST ASSOCIATION OF THE PAPER INDUSTRY

Affiliated with

THE AMERICAN PAPER AND PULP ASSOCIATION

Conducted by THOS. J. BURKE, C.A., Sec-Treas

State Taxation And Forestry*

By R. B. Goodman, Chairman, Advisory Tax Committee, National Lumber Manfrs. Association

Our federal taxes have been materially reduced and the prospects of some further reduction is strong. To a greater extent than ever before the burden of taxation in our forest industries is of a state, county and purely local character. This rapidly increasing burden demands our consideration, as it has a direct and vital bearing on forest finance.

The following data taken from the United States Bureau of the Census published in the Congressional record recently indicate the seriousness of this problem in the principal lumber producing states:

Expenditures expressed on per capita basis for years 1924 and 1917 of forest states, showing routine expenditures for maintenance and operation, exclusive of all public improvements.

	Per capita expenditure for 1924	Per capita expenditure for 1917	Increase of 1924 over 1917
California	$14.14	$7.18	96.9
Florida	5.55	3.83	44.8
Georgia	4.73	2.48	90.7
Louisiana	7.29	3.50	108.2
Maine	13.09	8.56	52.9
Michigan	9.53	7.25	31.4
Minnesota	12.34	8.15	51.4
Mississippi	6.04	2.54	137.7
Missouri	7.92	3.31	139.2
New Hampshire	10.02	5.50	82.1
Oregon	11.06	5.90	87.4
South Carolina	5.26	1.82	189.
Tennessee	4.70	2.69	74.7
Texas	7.92	4.59	72.5
Vermont	12.57	9.36	34.2
Virginia	8.71	3.96	119.9
Washington	13.13	5.28	148.6
West Virginia	6.34	2.72	133.
Wisconsin	9.20	6.04	52.3

The aggregate of state expenditures, exclusive of permanent improvements, for 1924 is over a billion dollars, and the aggregate of city, county and local districts for administration costs, probably are more than twice as much as the state governments.

In these modern days of enlightened self-government of budgets, and community interest in civic affairs, state and local governmental activities, generally speaking, are of a value to the community far in excess of their cost. The preservation of safe and orderly life, the protection of the health and safety of the individual, the development of agriculture, the spread of higher standards of education, the creation of a system of hard surfaced highways and county and town roads, not alone national routes of macadam from the Atlantic to the Pacific, and the Gulf to Canada, but hard roads from the farm to market all over our broad land. All these enterprises are things of common benefit that can best be carried on at the public expense.

We believe, however, that the vast business of our State governments needs better coordination, the elimination of duplication, and rigid standards of economy, particularly in those projects for which special sums have been appropriated in excess of actual requirements. We believe that the wonderful accomplishment in constructing a system of highways is fast reaching a point where expenditures should be limited to maintenance, and that in all of the State's activities a policy of rigid economy similar to the policy of the federal government would enable the State to materially reduce the burden of taxation without impairing the benefits of State administration.

Speaking for the forest industries in every state, a reduction in taxation is the first requisite of any forestry program for the preservation and further development of our forest resources, but whatever plan of forest taxation is advocated, I believe that the forests and the forest industries should bear their proper and fair proportion of the tax burden. Therefore greater economy on the part of the state governments is the only fair means of obtaining a reduction in taxes on timber.

I do not need to emphasize the importance to the forest states of their forest industries. Lumber manufacturing, wood working and manufacture of pulp and paper, have been the pioneering force of their development and still are, generally, their principal source of employment and the hope for their continued prosperity.

Forest industry presents two distinct problems of public interest; first, the economic conversion of our stands of mature timber, and second, the raising of a new forest crop, either concurrently with present cutting, or on cutover lands not required for agriculture. Annually the forest industries are releasing about three million acres of land. Agriculture is working more intensively on the land it already has. In the State of Wisconsin alone there are over ten million acres of cutover land awaiting development.

Conversion of Timber

There used to be a doctrine of hope in the lumber industry —hope that has sustained the lumberman through years of declining demand, through years of deficit and lessening margins of profit. That hope we called "Exhaustion of Timber." Timber has been sold and resold; mills have been built always in the belief that as the available supply of standing timber decreased, production would constantly fall below demand and realization would increase. We believed that these increased realizations would carry out remaining mature timber supply indefinitely. We have recently discovered our mistake. We realize that the industry has reached a critical condition. High taxes are forcing the rapid exhaustion of many of our remaining forest areas, causing overproduction and ruinously low returns.

The reason that this timber is being cut sometimes at a faster

* National Lumber Manufacturers Association Bulletin.

rate than is readily absorbed by the market is because the timber owner is unwilling to risk indefinitely the expenditures of interest and taxes necessary to carry this timber for future cutting. In the northern counties of Wisconsin, taxes on timber land have advanced during the past ten years from 50 cents per acre to $1.25, and from 30 cents to 75 cents. The total of real and personal property and income taxes affecting the average lumber operation in that state have increased from $1.10 per M ft. to $2.86 per M. ft. The average value of lumber shown by the three years' sales of a representative mill for the years 1913, 1914 and 1915, was $18.04; and for the years 1923, 1924 and 1925, was $34.74, an increase of 90 per cent. The cost of labor and supplies for the years 1913 to 1915 was $14.95, and for the years 1923 to 1925 was $27.46, an increase of 80 per cent, and the taxes of all kinds from $1.10 to $2.86 per M ft., or an increase of 160 per cent.

Failed to Increase Relatively

For many years the value of stumpage increased each year by a sufficient amount to pay a fair interest on the investment and to pay the taxes and carrying charges, but stumpage values of ten years ago, as compared with stumpage values of today, have failed to increase relatively with the cost of other commodities; they have failed to increase to the extent of interest and taxes expended in carrying them. Using again the typical illustration above cited, it will be seen that the margin between cost and taxes in 1913 to 1915 amounted to $1.99 per M ft., and that this margin has increased to $4.16 per M ft. in 1923 and 1925. The stumpage value used for both periods is the same and was $4.00 per M ft. Applying the increment in the margin of sales over cost, or the difference between $1.99 and $4.16, we get a gain of $2.17 in stumpage value, or a little over 50 per cent increase.

In our industry, increase in taxes, comes out of our realization from our timber. If, through economy in state and local administration, the general burden of taxes can be reduced or at least maintained on the present ratio to commodity costs, there will be less pressure on our industry and a better future prospect of increased value in stumpage, which will warrant the purchase and holding of timber by wood using industries for a future supply of raw material.

Reforestation

The outlook for reforestation on cutover lands in the Atlantic, Gulf and Lake States, has never been more propitious. The demand for these lands for agricultural purposes has so slackened that except in specially located areas the owners are no longer deterred from thoughts of forestry by the hope of selling their cutover lands to settlers. The development of a market for pulpwood through the paper industry offers a merchantable crop in from fifty to sixty years. The urge of urban population in the great cities, facilitated by good roads and automobiles, has developed recreational uses for wild land, not incompatible with the growth of timber. There remain, however, three outstanding determents to reforestation on the part of private owners:

First is Ownership

These cutover lands are owned largely by individuals or close corporations having a period life and it is difficult for these individuals or corporations to adjust themselves to investments in planting and in carrying charges which can only be realized a half century hence. This however is a temporary condition. When is can be demonstrated as a profitable enterprise over a long period of time, private capital will find the means of acquiring and blocking up cheap cutover lands for this purpose.

Second is Fire Protection

Private capital will never undertake extensive reforestation unless it can be assured of adequate fire protection, and we wish to impress upon the state governments the importance of work along this line, first by way of general education, second by an adequate organization of patrol, and third by practical cooperation between the state and the counties and private owners, in the efficient expenditure of funds for fire fighting. We emphatically urge the enactment of such legislation as may be necessary in the different forest states to place fire patrol and fire protection on a business basis, its officers independent of local politics or friendship, and yet so in sympathy with the farmer, settler, logger and camper, that this work will obtain their continued cooperation. With adequate fire protection for young timber, Forester W. H. Greeley, Chief of the United States Forest Service, has declared that we have solved 90 per cent of the problem of reforestation.

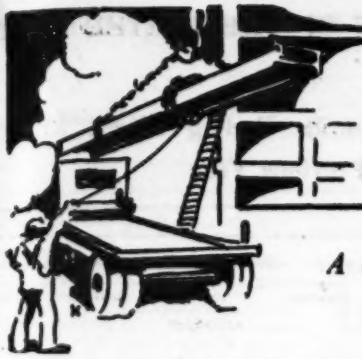
Third and Final Obstacle

The third and final obstacle to reforestation on the idle land in our forest states is not alone the burden of taxation that we must all bear, but the unequal distribution of that burden on these idle lands. Many Tax Commissions are alive to this injustice, and the assessors of incomes in various districts are instructing the local assessors concerning the classification of lands and land values. When cutover lands were selling at from $15.00 to $25.00 an acre, the owners of these lands, the assessors and all concerned, failed to realize that it was the choice locations and soil that brought these values in a wave of agricultural expansion; but since the war and since the restriction of immigration, even these lands have materially decreased in value. But the poorer lands alongside of them never had a retail market value of even $15.00 or $10.00, or even $5.00 per acre, and much of that land now has absolutely no market value. The fact that an owner of such land allows it to go [illegible] county for taxes proves both that it has no appreciative market value and that the taxes are capable of confiscating such values as it has. When these lands are placed on the assessment roll at 25c or 50c an acre instead of $2.50 and $5.00 an acre, they will cease to be dropped for taxes, but such an adjustment cannot be made in a single year, or even two or three years; but as it is made by the local assessors these wild lands will begin to have some marketable value. Fortunately that value is low enough to offer an inducement for their utilization in forestry, but as these lands are planted and as the growth begins to assume prospective value, the young timber must be assessed, and each year the assessment must be increased. The fear of this increasing tax burden added to the other carrying charges, and the necessity for continuing these taxes and carrying charges over a long period of time, discourages the enterprise.

How Some States Have Met Problems

Several of the States have sought to meet this problem by the classification of these lands as forestry lands, subject to a nominal annual tax and a severance tax or yield tax when the crop is cut. Michigan has recently passed an act of this kind, but so far only a small amount of land has been entered under it, the reason being that the severance tax is too high a percentage to invite investing capital. The legislation of West Virginia has a committee working on this problem now in that State. The Forest Service has recently appointed Professor Fred R. Fairchild of the Department of Economics at Yale University, to organize a study of this forest tax problem. The Forest Service has also in cooperation with the various states, established forest experimental stations, one of which has headquarters at St. Paul, Minnesota, and is under the direction of Raphael Zon, one of the leading foresters and economists in the Forest Service.

We believe that timber owners in the forest states can, in cooperation with these various agencies prepare and present to the proper committee of their state legislature, so complete a statement of the forest finance involved in this problem, that these legislatures will be able to frame special tax laws with respect to forestry lands that will be fair to other taxpayers and to the local taxing districts, and yet be of sufficiently liberal a character to induce capital to undertake reforestation on an exten-



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Shelton, Wash.—The Rainier Pulp and Paper Company has completed plans and will proceed with the construction of a new pulp and paper mill on local site. The main building will be one-story, 110 x 1500 feet, to be equipped with paper-making machines and auxiliary equipment The pulp mill will be 110 x 150 feet. Plans for the latter structure have been arranged by V. D. Simons, 431 North Michigan Avenue, Chicago, Ill., engineer. A general contract for the initial buildings has been awarded to Christopher Kuppler & Sons, Port Angeles, Wash. A. V. Bennett, chief engineer, Washington Pulp and Paper Company, Port Angeles, has been acting in an engineering capacity for the new project; K. O. Foss, vice-president of the Washington Pulp & Paper Company, is also interested in the new organization. The complete plant is reported to cost close to $1,000,000.

Bellingham, Wash.—The Pacific Coast Paper Mills Company, Chestnut and Army streets, is said to be considering preliminary plans for the erection of a new pulp mill, reported to cost in excess of $200,000, with machinery.

Philadelphia, Pa.—The John M. Driver Company, 55th and Hunter streets, manufacturer of paper products, has completed plans and will proceed immediately with erection of proposed new plant at 57th street and Lancaster avenue. It will be one and two-story, 60 x 270 feet, reported to cost close to $100,000, with machinery. A general contract for erection has been awarded to the R. P. Whitty Company, Union Trust Building, Washington, D. C. Stetler & Deyser, 1015 Chestnut street, are architects. John M. Driver is president.

Kalamazoo, Mich.—The Kalamazoo Paraffin Company, Reed and Fulford streets, is considering preliminary plans for the early rebuilding of the portion of its mill destroyed by fire, May 26, with loss reported at $20,000, including equipment. The reconstruction is expected to cost close to a like sum.

Cincinnati, Ohio—The new mill to be erected by the Western Paper Goods Company, Third and Lock streets, on site at the Paddock Road and Tennessee avenue, will be used, as well, by the United States Paper Goods Company, an affiliated organization. Preliminary work has been started and it is said that the plant will be pushed to early completion. It will be one story, sawtooth roof type, totaling about 100,000 square feet of floor space. Fred C. Berold is general manager of both companies.

Milwaukee, Wis.—The Leader Card Works, 376 First avenue, manufacturer of card stocks, has plans nearing completion for the erection of a new one-story and basement addition at location noted, to be 25 x 140 feet, reported to cost about $45,000, with equipment. Eschweiler & Eschweiler, 210 Mason street, are architects. G. A. Wilke is president.

Brooklyn, N. Y.—The Gibralter Corrugated Paper Company, 3611 14th street, Brooklyn, has closed negotiations for the purchase of a plot of land on the Hackensack Plank Road, near thirty-sixth street, Bergen county, N. J., of size 150 x 380 feet. The new owner plans the early erection of a new plant on the site for the manufacture of corrugated paper boxes and containers, to be two-story, reported to cost in excess of $50,000, with equipment.

Philadelphia, Pa.—The Simpkins Paper Box Company has disposed of its four-story factory at 2305-9 North Eighth street, on site 57 x 96 feet, for a reported consideration in excess of $60,000. No announcement has as yet been made regarding the future plans of the selling company, but it is understood that it will continue to operate as heretofore.

East Walpole, Mass.—Bird & Son, Inc., East Walpole, manufacturer of roofing papers and kindred products, has work in progress on a new addition to its plant, to be three-story and basement, 75 x 255 feet, to be used primarily for storage and distributing service. The cost is reported in excess of $125,000. Monks & Johnson, 99 Chauncy street, Boston, Mass., are architects and engineers.

Fort William, Ont.—The Fort William Paper Company, Ltd., has work in progress on an expansion and improvement program at its mill, to include extensions in the paper making department and the installation of additional machinery to increase the capacity to 175 tons per day. The work will also include the construction of a new sulphite mill of 75 tons daily rating; the expansion will be pushed to completion and is expected to be ready for service in the near future. The company has arranged for a bond issue of $3,500,000, a considerable portion of the fund to be used in connection with the development program. The company is controlled through the Fort William Power Company by the Spanish River Pulp and Paper Mills, Ltd., and the Mead Investment Company, Dayton, Ohio, which latter is affiliated with the Mead Pulp & Paper company of the same place. W. N. Hurlbut is president of the Fort William company.

New Companies

Philadelphia, Pa.—The National Wall Paper Mills, Inc., has been incorporated with a capital of $60,000, to manufacture and deal in wall papers and other paper goods. Max Seifer, 614 Dauphin street, Philadelphia, is treasurer and representative.

Arden, Del.—The Curtis & Brother Company has been incorporated with capital of $750,000, to manufacture paper products. A local mill will be operated. The corporate office of the new organization is at Newark, Del.

Chicago, Ill.—The Automatic Carton Company, 1025 South Menhard street, has been incorporated with a capital of $50,000, to manufacture paper boxes and containers. The incorporators are John R. Tyler and Herman H. Hann. The company is represented by Castle, Williams, Long & Castle, 112 West Adams street, Chicago, attorneys.

Cincinnati, Ohio—The Thompson Package Filler Company has been incorporated with capital of $25,000, to manufacture paper fillers, corrugated paper products, etc. The incorporators are Walter Thompson, R. A. Albrecht and Orland E. Cullums, all of Cincinnati.

Brooklyn, N. Y.—The Coast Cities Fibre Box Corporation, has been incorporated with a nominal capital of $5,000, to manufacture and deal in fibre and paper boxes and other containers. The incorporators are J. Pfeffer, L. Levy and J. A. Alloca. The company is represented by T. B. Cullen, 217 Havemeyer street, Brooklyn.

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending March 31, 1926, and for the Nine Months Ending March 31, 1926 as Compared with Corresponding Months of Previous Year

IMPORTS—PAPER

	March				Nine Months Ending March 31			
	1925		1926		1925		1926	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Paper and manufactures (total)	.....	10,503,251	.....	12,008,663	.....	87,455,069	.....	92,198,197
Printing paper—								
Standard newsprint .....lbs...free	255,836,683	9,188,416	316,799,723	10,687,801	2,067,999,154	75,550,600	2,284,028,714	80,302,371
Imported from—								
Finland	3,378,328	103,280	4,367,082	136,915	47,540,227	1,512,124	22,934,115	692,572
Germany	4,804,630	143,046	2,871,300	91,055	39,451,182	1,182,745	36,916,743	1,136,785
Netherlands	175,399	6,535	.....	.....	1,193,359	39,638	352,849	10,600
Norway	3,290,345	112,361	592,889	17,780	33,075,837	1,046,440	16,023,986	483,472
Sweden	9,982,646	286,877	6,812,281	212,914	115,652,457	3,591,531	86,875,674	2,641,926
Canada	234,024,358	8,530,515	302,096,398	10,227,139	1,817,935,109	67,743,539	2,064,439,559	73,463,139
Other countries	180,977	5,802	59,773	1,998	13,150,983	434,583	56,485,788	1,873,917
All other, n. e. s.....lbs...dut.	2,307,222	105,672	874,622	46,618	19,242,473	855,150	9,133,633	461,634
Grease-proof and water-proof papers..lbs...dut.	207,412	27,151	255,783	37,381	970,041	118,323	1,699,299	236,699
Kraft wrapping paper .....lbs...dut.	1,797,224	64,447	305,058	13,290	16,349,134	654,681	8,419,019	367,029
All other wrapping paper.....lbs...dut.	369,725	15,576	498,137	73,092	10,508,834	427,660	3,213,597	230,262
Writing, drawing, bond, etc.....lbs...dut.	281,098	55,272	377,353	77,831	2,308,014	533,786	2,691,592	619,958
Surface coated .....lbs...dut.	139,943	45,482	201,773	78,847	1,519,880	377,369	1,247,899	460,222
Tissue paper .....lbs...dut.	406,394	128,688	210,887	107,389	2,160,035	834,990	1,864,412	813,179
Pulp boards in rolls .....lbs...dut.	7,622,029	193,117	7,680,952	187,264	51,806,165	1,399,914	3,996,311	1,378,898
Other paper boards, n. e. s.....lbs...dut.	2,897,090	77,534	2,885,776	59,073	23,755,273	559,335	20,228,407	503,153
Cigarette paper, cigarette books and covers .....lbs...dut.	657,735	173,800	600,465	156,966	7,128,542	2,018,224	8,736,016	2,469,814
Hanging paper .....lbs...dut.	415,474	46,544	438,855	69,875	8,431,330	435,323	3,720,968	493,200
Paper boxes .....lbs...dut.	226,435	135,716	231,359	96,435	1,719,679	1,124,657	1,627,393	857,882
Pulp or papier-mache and manufactures of, n. e. s. .....lbs...dut.	.....	.....	136,444	26,353	.....	.....	[3] 806,628	[3] 121,502
Duplex decalcomania, not printed.....lbs...free	30,704	7,989	37,980	9,761	409,260	97,714	340,348	86,330
All other .....dut.	.....	237,847	.....	280,687	.....	2,467,343	.....	2,796,064

WOOD PULP

Mechanically ground wood pulp.....ton..free	16,871	496,149	21,800	647,177	191,404	6,070,843	224,196	6,344,558
Chemical wood pulp—								
Sulphite, unbleached .....ton..free	53,638	2,857,777	38,400	2,329,316	488,916	25,906,149	440,156	24,619,940
Sulphite, bleached .....ton..free	28,050	2,204,806	28,889	2,277,735	235,955	17,694,664	206,796	16,621,225
Total sulphite .....ton	81,688	5,062,583	67,289	4,607,051	724,871	43,600,813	646,952	41,241,165
Imported from—								
Finland	6,239	355,780	3,231	191,165	43,236	2,259,436	32,791	1,806,106
Germany	7,341	457,436	9,341	630,522	66,576	3,893,182	47,996	3,096,583
Norway	7,538	557,644	6,405	522,561	56,755	3,974,292	48,707	3,816,691
Sweden	21,441	1,249,534	6,363	434,152	270,753	15,080,252	188,061	11,369,057
Canada	35,454	2,252,855	38,887	2,619,695	261,072	16,891,005	307,940	19,981,436
Other countries	3,675	189,334	3,062	208,956	26,479	1,502,646	21,457	1,171,292
Sulphate pulp, unbleached (Kraft pulp) .....ton..free	24,106	1,436,445	20,263	1,307,839	239,606	13,509,654	220,850	13,581,878
Imported from—								
Finland	1,446	73,767	882	39,531	11,472	561,150	10,491	567,244
Norway	915	57,850	530	35,570	10,169	555,924	6,967	436,813
Sweden	9,261	517,889	4,897	282,951	122,862	6,450,184	99,369	5,786,799
Canada	11,763	746,275	13,105	894,390	91,024	5,725,218	99,964	6,518,160
Other countries	721	40,664	849	55,397	4,079	217,178	4,059	272,862
Sulphate pulp, bleached .....ton..free	1,522	98,435	630	40,633	28,168	1,584,512	14,429	829,215
Other pulp .....ton..free	449	34,558	221	8,516	1,620	111,596	836	56,589

CRUDE PAPER STOCK

Rags for paper stock .....lbs...free	63,881,135	1,915,977	60,570,586	1,353,417	461,686,992	12,235,178	411,329,266	10,583,591
Waste bagging, waste paper, etc.....lbs...free	11,973,006	229,912	13,727,010	293,545	92,258,536	1,301,402	102,798,520	1,934,253
Old rope and all other paper stock...lbs...free	6,579,918	388,060	8,325,587	409,538	63,107,794	3,409,596	54,879,416	2,580,319

CHEMICALS AND OTHER PAPER MAKERS' MATERIALS

Colors, dyes, stains, color acids, and color bases, n. e. s. .....lbs...dut.	671,852	907,136	280,143	295,286	3,564,356	4,840,601	3,353,831	3,895,365
Imported from—								
France	14,268	21,469	15,672	23,378	86,857	129,477	116,696	160,298
Germany	319,538	435,571	33,852	27,553	1,814,719	2,560,502	1,618,427	1,760,412
Italy	27,512	37,337	7,547	7,569	141,211	195,042	80,278	92,006
Switzerland	263,787	354,540	168,598	178,267	1,150,654	1,539,063	1,422,375	1,464,874
United Kingdom	22,668	18,044	23,661	19,147	124,323	111,656	109,230	97,067
Other countries	24,079	40,175	30,813	39,372	246,592	304,861	206,825	320,708
Casein or lactarene .....lbs...dut.	1,559,077	119,528	3,513,755	297,817	12,516,621	905,259	13,860,428	1,250,824
Kaolin, china, and paper clay.....ton...dut.	46,494	358,442	56,050	532,436	247,638	2,358,310	251,870	2,470,639

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

PAPER AND MANUFACTURES OF	March 1925 Quantity	March 1925 Value	March 1926 Quantity	March 1926 Value	Nine Months Ending March 31 1925 Quantity	Nine Months Ending March 31 1925 Value	Nine Months Ending March 31 1926 Quantity	Nine Months Ending March 31 1926 Value
EXPORTS—PAPER								
Paper and manufactures (total)	.....	2,021,427	.....	2,349,941	.....	16,849,258	.....	18,894,832
Printing paper—								
News print paper ....lbs.	2,014,183	93,268	2,949,448	141,480	24,617,133	1,219,205	32,887,442	1,500,065
Exported to—								
Canada	46,761	4,310	108,067	9,809	569,642	43,778	591,507	43,162
Central America	93,818	4,057	153,292	6,935	565,815	30,412	1,187,331	59,604
Mexico	327,802	17,141	190,872	9,290	1,611,179	83,939	1,233,197	66,786
Cuba	1,062,053	42,446	275,560	12,950	11,267,338	482,706	7,771,088	323,623
South America	177,468	8,732	743,143	34,123	4,322,293	214,905	5,150,022	241,969
China	42,550	2,500	833,458	35,344	2,134,792	153,563	7,065,325	320,872
Philippine Islands	89,353	4,124	154,233	9,284	3,023,013	140,063	3,965,412	178,176
Other countries	174,378	9,958	490,823	23,745	1,123,061	69,839	5,923,560	265,873
Book paper, not coated ....lbs.	1,620,684	179,765	1,552,152	155,365	14,842,619	1,608,715	12,638,986	1,354,061
Exported to—								
United Kingdom	24,335	3,498	4,872	598	304,264	64,006	78,818	13,389
Canada	248,569	30,659	230,024	28,262	1,238,349	154,547	1,595,857	192,229
Central America	51,988	6,097	66,058	6,461	455,210	50,033	529,665	53,587
Mexico	156,819	19,619	189,163	21,058	1,884,031	211,377	1,367,786	152,585
Cuba	597,525	60,519	288,946	26,979	3,298,657	339,343	2,768,848	269,786
Argentina	67,045	5,601	101,236	8,799	461,836	49,315	577,235	64,301
Brazil	16,508	1,856	.....	.....	261,188	32,546	137,390	23,991
Venezuela	72,359	6,116	26,234	2,737	351,578	37,932	613,279	59,243
Other South America	136,054	12,922	128,105	10,819	1,030,347	111,683	1,035,482	98,066
China	43,299	6,612	115,317	10,995	3,371,720	309,073	1,062,724	141,926
Philippine Islands	120,606	10,940	219,690	18,937	966,572	92,582	1,392,732	123,532
Australia	500	58	22,448	2,870	341,797	38,054	373,974	40,879
Other countries	85,077	15,268	160,059	16,850	877,070	118,224	1,105,196	120,547
Cover paper ....lbs.	126,613	24,812	157,774	25,615	778,433	150,953	1,008,276	180,279
Grease-proof and waterproof paper ....lbs.	147,452	19,317	280,993	37,911	1,090,582	130,147	1,700,097	243,247
Wrapping paper ....lbs.	2,367,827	189,380	2,832,981	241,005	19,393,545	1,514,094	22,531,863	1,661,731
Surface-coated paper ....lbs.	186,033	30,155	310,946	46,810	2,340,731	336,064	3,743,371	505,562
Tissue and crepe paper ....lbs.	261,210	65,238	277,286	76,275	2,463,310	668,009	2,888,380	741,995
Toilet paper ....lbs.	532,914	65,371	376,997	45,308	3,354,197	409,159	3,569,245	430,706
Paper towels and napkins ....lbs.	95,457	17,014	134,423	21,360	940,398	156,431	1,463,792	209,166
Box board ....lbs.	770,116	31,349	5,090,330	140,935	[1] 2,267,024	[1] 88,569	27,455,461	877,098
Bristols and bristol board ....lbs.	81,934	11,035	113,499	14,225	608,074	76,964	1,003,935	118,282
Other paper board and strawboard ....lbs.	3,069,449	138,006	3,642,546	181,051	41,348,030	1,599,185	25,090,455	1,308,316
Sheathing and building paper ....lbs.	982,707	43,540	785,957	37,539	7,889,239	377,067	9,353,078	430,275
Wall board of paper or pulp....sq. ft.	964,937	30,170	1,957,450	63,636	10,897,599	380,374	12,178,960	410,743
Blotting paper ....lbs.	209,967	23,549	381,472	48,959	1,928,081	227,359	2,410,151	301,480
Filing folders, index cards, and other office forms ....lbs.	52,505	17,331	54,725	18,883	369,928	120,542	578,163	181,086
Papeteries (fancy writing paper) ....lbs.	35,477	12,875	69,808	28,725	368,261	125,808	465,982	169,641
Other writing paper ....lbs.	255,125	50,091	823,165	141,269	2,501,184	422,920	4,700,861	845,627
Cigarette paper and books ....lbs.	113,071	25,521	83,296	12,139	450,508	140,721	471,986	122,195
Paper hangings (wall paper) ....yds.	2,654,739	90,746	3,640,471	77,309	19,116,968	482,433	17,497,496	432,794
Paper bags ....lbs.	1,372,205	121,207	1,006,767	89,818	8,534,117	735,850	9,614,510	868,135
Boxes and cartons ....lbs.	1,352,164	104,644	2,223,965	139,098	9,972,526	876,092	14,780,742	1,066,511
Envelopes ....lbs.	220,978	43,365	191,575	34,429	1,876,011	357,630	1,759,732	345,348
Vulcanized fiber, sheets, strips, rods, and tubes ....lbs.	508,857	148,202	516,679	138,692	3,233,715	1,020,980	4,296,437	1,249,794
Manufactures of vulcanized and indurated fiber ....lbs.	37,882	20,745	16,522	6,550	320,771	147,919	279,941	116,720
Cash-register and adding-machine paper....lbs.	161,768	20,614	135,515	14,351	1,024,466	110,432	1,279,809	133,912
Other paper and paper products ....lbs.	.....	404,117	.....	371,204	.....	3,365,136	.....	3,090,063
WOOD PULP AND PAPER STOCK								
Sulphite wood pulp ....tons	2,058	115,064	1,811	135,205	17,122	1,012,614	17,174	1,111,384
Soda wood pulp ....tons	357	33,927	80	4,856	1,560	148,804	1,737	154,537
Other wood pulp ....tons	1,702	101,068	626	65,934	7,558	784,576	5,476	614,181
Rags, and other paper stock ....lbs.	16,209,137	317,920	15,683,345	233,420	99,242,652	1,667,836	131,083,264	2,417,349
PAPER AND PULP MILL MACHINERY								
Paper and pulp mill machinery ....lbs.	234,009	109,857	1,001,929	240,469	5,635,132	1,241,577	7,548,674	1,708,105

[1] Beginning Jan. 1, 1925.

"Gear Problems"

The latest edition of "Gear Problems" issued by the Foote Brothers Gear and Macrine Company, 215 Curtis Street, Chicago, has just come off the press.

Two years of preparatory work and a good deal of money have been expended to gather, tabulate, compile and present the information in the book in simple, comprehensive, usable and understandable form.

"Gear Problems" is not just a catalog, but contains engineering information on speed reducers, conveying equipment—gears of all kinds—mathematical tables, and a wealth of engineering information on mechanical engineering subjects.

As an aid to quick references it is indexed by subjects in the upper page corners, and has a very complete cross referenced index in the back.

Competent engineers state that "Gear Problems" is the most complete and useful reference book on the design, and application of modern speed reduction units and industrial gearing of all kinds that has ever been published.

Chief engineers, designers, production or maintainance engineers, and any plant executives who are concerned with power transmission or the operation and upkeep of machinery will find "Gear Problems" a valuable reference book and are welcome to a copy for the asking.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING JUNE 5, 1926

SUMMARY

Cigarette paper .....3,451 cs.
Wall paper .....26 bls., 18 cs.
Paper hangings .....36 bls., 8 cs.
News print .....558 rolls
Printing paper .....20 bls., 532 cs.
Wrapping paper .....69 bdls., 14 cs.
Packing paper .....231 rolls, 10 cs.
Silk paper .....2 cs.
Pergamyn paper .....27 cs.
Surface coated paper .....108 cs.
Baryta coated paper .....101 cs.
Gold coated paper .....2 cs.
Coated paper .....2 cs.
Photo paper .....3 cs.
Decalcomania paper .....3 cs.
Tissue paper .....21 cs.
Colored paper .....28 cs.
Paint paper .....3 cs.
Fancy paper .....51 cs.
Writing paper .....10 bls., 24 cs.
Filter paper .....70 bls., 56 cs.
Filter pulp .....20 bls.
Drawing paper .....1 roll, 3 cs.
Stencil paper .....20 cs.
Paper tubes .....4 cs.
Envelopes .....1 cs.
Strawboard .....931 rolls, 1,003 pkgs., 10 bls.
Miscellaneous paper .....39 rolls, 87 cs.

CIGARETTE PAPER

Standard Products Corp., Indep. Hall, Havre, 139 cs.
Standard Products Corp., Chicago, Havre, 81 cs.
British American Tobacco Co., Celtic, Liverpool, 5 cs.
American Tobacco Co., Sarcoxie, Bordeaux, 1,300 cs.
R. J. Reynolds Tobacco Co., Sarcoxie, St. Nazaire, 1,340 cs.
De Manduit Paper Corp., Sarcoxie, St. Nazaire, 446 cs.
P. J. Schweitzer, Pres. Van Buren, Marseilles, 140 cs.

WALL PAPER

F. J. Emmerich, Carinthia, Liverpool, 5 bls.
F. J. Emmerich, Hamburg, Hamburg, 4 bls.
F. J. Emmerich, Minnetonka, London, 3 bls.
R. F. Downing & Co., Minnetonka, London, 1 cs.; 14 bls.
Bendix Paper Co., Hamburg, Hamburg, 17 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Carinthia, Liverpool, 11 bls.
W. H. S. Lloyd & Co., Minnetonka, London, 25 bls., 8 cs.

NEWS PRINT

Parsons & Whittemore, Inc., Sagoporack, Hango, 482 rolls.
H. Reeve Angel & Co., Inc., Muenchen, Bremen, 76 rolls.

PRINTING PAPER

P. C. Zuhlke, Zeeland, Antwerp, 18 cs.
Keller Dorian Paper Co., La Savoie, Havre, 13 cs.
B. F. Drakenfeld & Co., Carinthia, Liverpool, 61 cs.
C. Steiner, Rotterdam, Rotterdam, 6 cs.
Herman Paper Co., Hamburg, Hamburg, 10 cs.
E. Dietzgen & Co., Inc., Hamburg, Hamburg, 4 cs.
Burroughs Wellcome & Co., Minnetonka, London, 6 cs.
Whiting & Patterson Co., Minnetonka, London, 2 cs.
Maurice O'Meara Co., Sagoporack, Hango, 129 cs.
National City Bank, Sagoporack, Hango, 243 cs.
B. F. Drakenfeld & Co., Celtic, Liverpool, 10 cs.
Maurice O'Meara Co., Muenchen, Bremen, 30 cs.
J. P. Hefernan Paper Co., Arabic, Hamburg, 20 bls.

WRAPPING PAPER

Blauvelt Wiley Paper Mfg. Co., California, Glasgow, 69 bdls.
F. C. Strype, Zeeland, Antwerp, 12 cs.
J. E. Bernard & Co., Arabic, Hamburg, 2 cs.

PACKING PAPER

Okonite Callender & Cable Co., Minnetonka, London, 231 rolls.
International Forwarding Co., Hamburg, Hamburg, 10 cs.

SILK PAPER

Globe Shipping Co., Rotterdam, Rotterdam, 2 cs.

PERGAMYN PAPER

F. C. Strype, Hamburg, Hamburg, 27 cs.

SURFACE COATED PAPER

P. C. Zuhlke, Zeeland, Antwerp, 69 cs.
Gevaert Co. of America, Zeeland, Antwerp, 39 cs.

BARYTA COATED PAPER

Globe Shipping Co., Geo. Washington, Bremen, 101 cs.

GOLD COATED PAPER

C. B. Richard & Co., Geo. Washington, Bremen, 2 cs.

COATED PAPER

RONEO CO., Minnetonka, London, 2 cs.

PHOTO PAPER

J. J. Gavin, Celtic, Liverpool, 3 cs.

DECALCOMANIA PAPER

L. A. Consmiller, Muenchen, Bremen, 3 cs.

TISSUE PAPER

F. C. Strype, Carinthia, Liverpool, 18 cs.
J. B. Mast & Co., Conte Rosso, Genoa, 3 cs.

COLORED PAPER

C. W. Williams & Co., Zeeland, Antwerp, 6 cs.
E. Dietzgen & Co., Inc., Hamburg, Hamburg, 22 cs.

PAINT PAPER

Tice & Lynch, La Savoie, Havre, 3 cs.

FANCY PAPER

Whiting & Patterson Co., Berengaria, Southampton, 6 cs.
Whiting & Patterson Co., Mauretania, Southampton, 6 cs.
Whiting & Patterson Co., Minnetonka, London, 39 cs.

WRITING PAPER

White, Burbank Co., California, Glasgow, 3 cs.
Guibout freres, La Savoie, Havre, 7 cs.
F. L. Kramer & Co., Minnetonka, London, 6 cs.
S. Stern, Minnetonka, London, 10 bls.
Coenca Morrison & Co., Mauretania, Southampton, 1 cs.
Japan Paper Co., Mauretania, Southampton, 5 cs.
Guibout freres, Mauretania, Southampton, 2 cs.

FILTER PAPER

National City Bank, Berengaria, Southampton, 70 bls., 14 cs.
H. Reeve Angel & Co., Inc., American Trader, London, 15 cs.
H. Reeve Angel & Co., Inc., Minnetonka, London, 13 cs.
H. Reeve Angel & Co., Inc., Majestic, Southampton, 12 cs.

FILTER PULP

F. Bing, Hamburg, Hamburg, 20 bls.

DRAWING PAPER

Steiner Paper Corp., Hamburg, Hamburg, 1 roll.
H. Reeve Angel & Co., Inc., Minnetonka, London, 3 cs.

STENCIL PAPER

Arlac Dry Stencil Co., Hamburg, Hamburg, 20 cs.

PAPER TUBES

H. de Maguinn, La Savoie, Havre, 4 cs.

ENVELOPES

H. Reeve Angel & Co., Inc., Minnetonka, London, 1 cs.

STRAWBOARD

Thompson & Norris Co., Rotterdam, Rotterdam, 332 rolls.
Haas Bros., Rotterdam, Rotterdam, 10 bls.
A. B. Massa Paper Corp., Rotterdam, Rotterdam, 1,003 pkgs.
A. Vuyk, Rotterdam, Rotterdam, 82 rolls.
State Bank, Rotterdam, Rotterdam, 517 rolls.

MISCELLANEOUS PAPER

Quality Art Novelty Co., Indep. Hall, Havre, 10 cs.
Safety Cable Co., California, Glasgow, 39 rolls.
R. Wilson Paper Corp., California, Glasgow, 50 cs.
Hensel Bruckman & Lorbacher, La Savoie, Havre, 4 cs.
Devoe & Reynolds Co., American Trader, London, 4 cs.
H. de Maguinn, France, Havre, 9 cs.
Guibout freres, France, Havre, 8 cs.
Houbigant, Inc., France, Havre, 2 cs.

RAGS, BAGGINGS, ETC.

Atlas Waste Manfg. Co., Indep. Hall, Dunkirk, 309 bls. rags.
Atlas Waste Manfg. Co., Indep. Hall, Havre, 77 bls. rags.
A. W. Fenton, Inc., Cabo Espartel, Marseilles, 30 bls. rags.
Royal Manfg. Co., Cabo Espartel, Genoa, 127 bls. rags.
Equitable Trust Co., Cabo Espartel, Genoa, 138 bls. rags.
M. Snedeker Corp., Hoosac, Belfast, 138 bls. rags.
Hughes Fawcett, Hoosac, Belfast, 24 bls. flax waste.
Castle & Overton, Inc., Hoosac, Dundee, 69 bls. rags.
A. W. Fenton, Inc., Hoosac, Leith, 75 bls. rags.
B. F. Kaplan, Carinthia, Liverpool, 10 bls. rags.
E. J. Keller Co. Inc., Hamburg, Hamburg, 120 bls. rags.
The Stone Bros. Co., Inc., Hamburg, Hamburg, 8 bls. rags.
Esabeckay Import & Export Co., Hamburg, Hamburg, 22 bls. rags.
Amsinck Sonne & Co., Inc., Hamburg, Hamburg, 67 bls. rags.
State Bank, Hamburg, Hamburg, 760 bls. bagging.
Brown Bros. & Co., Minnetonka, London, 75 bls. rags.
Darmstadt Scott & Courtney, Carso, Naples, 13 bls. rags.
Chase National Bank, Carso, Naples, 219 bls. rags.
Atterbury & McKelvey, Carso, Naples, 47 bls. rags.
National City Bank, Chicago, Harve, 101 bls. rags.
V. Galaup, Chicago, Havre, 44 bls. rags.
Amsinck Sonne & Co., Inc., Celtic, Liverpool, 76 bls. rags.
Mutnick Bros. & Co., Celtic, Liverpool, 29 bls. rags.
Irving Bank Columbia Trust Co., Oscar II, Copenhagen, 34 bls. bagging.
Irving Bank Columbia Trust Co., Muenchen, Bremen, 47 bls. rags.
Royal Manfg. Co., Tofuku Maru, Genoa, 41 bls. bagging.
A. W. Fenton, Inc., Sarcoxie, Bordeaux, 70 bls. rags.
National City Bank, Zeeland, Antwerp, 192 bls. flaxwaste.
G. M. Graves Co., Innoko, Rotterdam, 331 bls. rags.
The Stone Bros Co., Inc., Innoko, Rotterdam, 63 bls. rags.
M. Maier Papermill Supply Co., Innoko, Rotterdam, 53 bls. bagging.
Sterling Mill Supply Co., Innoko, Rotterdam, 32 bls. fustians.
Sterling Mill Supply Co., Innoko, Rotterdam, 99 bls. bagging.
L. H. Abenheimer, Innoko, Rotterdam, 156 bls. jutewaste.

OLD ROPE

M. Maier Papermill Supply Co., Rotterdam, Rotterdam, 37 coils.
Brown Bros & Co., Rotterdam, Rotterdam, 52 coils.
Brown Bros. & Co., Zeeland, Antwerp, 83 coils.
Brown Bros. & Co., Washington, Maru, Hamburg, 35 coils.

MANILA ROPE

New York Cordage Co., Zeeland, Antwerp, 87 coils.
Ellermans' Wilson Line, Minnetonka, London, 107 coils.

SUNN ROPE

New York Cordage Co., Zeeland, Antwerp, 10 coils.

WOOD PULP

Pagel Horton & Co., Inc., Randfjord Gefle, 4250 bls. Sulphate 559 tons.
Bulkley Dunton & Co., Randfjord, Gefle, 250 bls. sulphite, 50 tons.
Bulkley Dunton & Co., Randfjord, Skutskar, 500 bls. sulphite, 100 tons.
Scandinavian Pulp Agency Inc., Randfjord, Skutskar, 6795 bls. dry pulp, 1093 tons.
Castle & Overton, Inc., Zeeland, Antwerp, 2938 bls. woodpulp.
Tidewater Papermills Co., Bornholm, Liverpool, N. S., 12567 bls. woodpulp.
Bulkley Dunton & Co., Sagoporack, Hernosand, 900 bls. sulphite, 150 ton.
E. M. Sergeant & Co., Sagoporack, Hernosand, 2100 bls. sulphite, 350 tons.
Johanson Wales & Sparre Inc., Sagoporack, Hernosand, 300 bls. sulphite, 50 tons.
Pagel Horton & Co., Inc., Brosund, Hernosand 3,000 bls. sulphite, 500 tons.
J. Anderson & Co., Brosund, Hernosand, 5,100 bls. sulphite, 850 tons.
J. Anderson & Co., Brosund, Soderhamn, 3,425 bls. sulphite, 685 tons.
J. Anderson & Co., Brosund, Soderhamn, 3,000 bls. sulphate, 600 tons.
Bulkley Dunton & Co., Brosund, Soderhamn, 2,000 bls. sulphate, 400 tons.

(Continued on page 74)

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FORMING AND DRYING MACHINES
UTILIZATION OF WASTE FIBRES

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Oiled Stencil Board
Lamp Shade Parchment
IN A VARIETY OF GRADES AND COLORS
101 BEEKMAN STREET NEW YORK

Imports of Paper and Paper Stock

(*Continued from page 72*)

Bulkley Dunton & Co., Brosund, Soderhamn, 3,375 bls. sulphite, 675 tons.
J. Anderson & Co., Malmen, Gothenburg, 500 bls. woodpulp.
Buck Kiaer & Co., Inc., Oscar II, Oslo, 720 bls. kraft pulp.
Irving Bank Columbia Trust Co., Muenchen, Bremen, 735 bls. woodpulp.
Scandinavian Pulp Agency, Inc., Muenchen, Bremen, 1,250 bls. woodpulp.
J. Anderson & Co., Muenchen, Bremen, 135 bls. woodpulp.
Nilsen Lyon & Co., Inc., Muenchen, Bremen, 150 bls. sulphite.
Nilsen Lyon & Co., Inc., Washington Maru, Hamburg, 1,150 bls. sulphite.
S. Silberman, Innoko, Rotterdam, 75 bls. rags.
Bulkley Dunton & Co., Innoko, Rotterdam, 140 bls. woodpulp, 28 tons.
French American Banking Corp., Innoko, Rotterdam, 740 bls. woodpulp, 154 tons.
The Borregaard Co., Inc., Norefjord, Sarpsborg, 2,100 bls. sulphate.
J. Anderson & Co., Norefjord, Sarpsborg, 882 bls. sulphite.
Buck Kiaer & Co., Inc., Norefjord, Oslo, 2,150 bls. sulphite.
Buck Kiaer & Co., Inc., Cleveland, Halmstad, 500 bls. sulphite.
H. Hollesen, Inc., Berlin, Bremen, 2,355 bls. woodpulp, 471 tons.

WOOD PULP WADDING

Birn & Wachenheim, Rotterdam, Rotterdam, 50 bls.

WOOD FLOUR

A. Kramer & Co., Inc., Rotterdam, Rotterdam, 400 bags.
The Hansa Co., Innoko, Rotterdam, 400 bls., 20,300 kilos.
Composition Materials Co., Norefjord, Flekkefjord, 280 bags, 14,100 kilos.
B. L. Soberski, Norefjord, Frederikstad, 1,950 bags.

CASEIN

Crawford, Hammond & Co., Commack, B. Aires, 417 bags, 25,020 kilos.
T. M. Duche & Sons, Minnetonka, London, 788 bags.
National City Bank, Halesius, B. Aires, 1,667 bags.
The Kalbfleisch Corp., Voltaire, B. Aires, 1,500 bags.
National City Bank, Sarcoxie, Bordeaux, 133 bags, 10,000 kilos.
T. M. Duche & Sons, Sarcoxie, Bordeaux, 163 bags, 13,099 kilos.

PHILADELPHIA IMPORTS

WEEK ENDING JUNE 5, 1926

E. H. Bailey & Co., Hoosac, Leith, 89 cs. paper.
Brown Bros. & Co., Hoosac, Leith, 67 coils old rope.
Union National Bank, Hoosac, Leith, 57 coils old rope.
Scandinavian Pulp Agency, Inc., Malmen, Gothenburg, 254 bls. woodpulp.
J. Anderson & Co., Malmen, Gothenburg, 1,750 bls. woodpulp.
Castle & Overton, Inc., Malmen, Gothenburg 203 bls. woodpulp.
The Borregaard Co., Inc., Malmen, Gothenburg, 264 rolls paper, 5 bls.
Paper Manufacturing Co., Malmen, Gothenburg, 112 rolls paper.
Dee Paper Co., Malmen, Gothenburg, 68 rolls paper.
Wilkinson Bros. & Co., Inc., Malmen, Gothenburg, 10 bls. paper.
S. E. Ingler & Co., Innoko, Rotterdam, 167 bls. rags.
A. W. Fenton, Inc., Innoko, Rotterdam, 16 bls. rags.
S. Birkendtein & Sons, Innoko, Rotterdam, 231 bls. rags.
Union National Bank, Innoko, Rotterdam, 83 bls. bagging.
Castle & Overton, Inc., Innoko, Rotterdam, 400 bls. woodpulp, 21 tons.
Castle & Overton, Inc., Innoko, Rotterdam, 197 bls. rags.
New England Waste Co., Innoko, Rotterdam, 93 bls. bagging.
Brown Bros. & Co., Washington Maru, Hamburg, 258 bls. rags.
Leshner Paperstock Co., Sarcoxie, Bordeaux, 25 bls. rags.
Buck Kiaer & Co., Inc., Delaware, Oslo, 200 bls. sulphite pulp.
Castle & Overton, Inc., Sarcoxie, Bordeaux, 651 bls. rags.

BOSTON IMPORTS

WEEK ENDING JUNE 5, 1926

First National Bank of Boston, Halesius, B. Aires, 1,500 bags casein.
T. M. Duche & Sons, Halesius, B. Aires, 417 bags casein.
Castle & Overton, Inc., ——, Rotterdam, 939 bls. woodpulp.
Buck Kiaer & Co., Inc., Texas, Oslo, 400 bls. kraft pulp.
H. Hollesen, Inc., Westpool, Hamburg, 390 bls. sulphite, 78 tons.

NEW ORLEANS IMPORTS

WEEK ENDING JUNE 5, 1926

Castle & Overton, Inc., De La Salle, France, 82 bls. rags.
Castle & Overton, Inc., Gand, France, 90 bls. rags.

NORFOLK IMPORTS

WEEK ENDING JUNE 5, 1926

Scandinavian Pulp Agency, Inc., Malmen, Gothenburg, 3,556 bls. woodpulp.

BALTIMORE IMPORTS

WEEK ENDING JUNE 5, 1926

Congoleum Nairn Co., Indep. Hall, Dunkirk, 45 bls. rags.
Congoleum Nairn Co., Indep. Hall, Havre, 512 bls. rags.
National City Bank, Indep. Hall, Havre, 578 bls. rags.
Pagel Horton & Co., Inc., Randfjord, Gefle, 100 bls. sulphate pulp.
Star Co., Malmen, Norrkopping, 272 rolls news print.
Price & Pierce, Ltd., Malmen, Stockholm, 3,200 bls. woodpulp.
Perkins Goodwin & Co., Malmen, Gothenburg, 1,800 bls. woodpulp.
Johanson Wales & Sparre, Inc., Malmen, Gothenburg, 5,698 bls. woodpulp.
Scandinavian Pulp Agency, Inc., Malmen, Gothenburg, 500 bls. woodpulp.
J. Anderson & Co., Malmen, Gothenburg, 125 bls. woodpulp.
E. M. Sergeant & Co., Malmen, Gothenburg, 4,982 bls. woodpulp.
Parsons & Whittemore, Inc., Malmen, Gothenburg, 750 bls. woodpulp.
Baxter Paper Co., Malmen, Gothenburg, 80 bls., 813 rolls paper.
The Borregaard Co., Inc., Malmen, Gothenberg, 10 bls. paper.
Castle & Overton, Inc., Boschdyk, Antwerp, 2,617 bls. woodpulp.

Traffic Men Meet in Ohio

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, June 8, 1926.—T. T. Webster, of Dayton, identified with the George H. Mead Company, paper manufacturers, and who is president of the national traffic association known as the Associated Traffic Clubs of America, was toastmaster at the dinner which followed the regular meeting of the Ohio Valley Shippers' Advisory Board at the Hotel Gibson, in Cincinnati today.

Mr. Webster served creditably in that capacity and uttered a few words of wisdom regarding the betterment of traffic conditions for manufacturers in general.

The Miami Valley Traffic Association held its meeting at the same time. Maurice T. Otto, secretary, had just returned from Cleveland where he attended the session of the Ohio State Industrial Traffic League. He told of the work accomplished by that organization, including the proposed intervention affecting rates from Ohio to what is known as the Mississippi River Crossing. The League will endeavor to joint through rates established to the Mississippi River gateway, he asserted.

The Ohio Valley Shippers' Advisory Board heard talks by transportation experts, P. T. White, general superintendent of the Big Four railway company, having been on the program. Prof. C. O. Ruggles, dean of the College of Commerce and Journalism of Ohio State University, also spoke.

It was explained that since the Ohio Valley Advisory Board has been in existence, as well as similar organizations in other sections of the country, there has been no car shortage, no transportation difficulties, a decrease in the loss and damage claims and a splendid spirit of co-operation between shippers and the railways.

Showing their interest in the gatherings, the railroads offered a oneway fare, plus one dollar, for members to go to Cincinnati to attend this week's meeting. Many members of the Miami Valley Traffic Association, however, made the trip by automobile. Virtually all of the cities in the valley were represented. Mr. Webster is a prominent member of this association.

Raymond Bag Co. Salesmen Meet

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, June 8, 1926.—A large number of the salesmen, dealers and other representatives of the Raymond Bag Company, of Middletown, are assembled this week in convention in the Paper City to discuss business conditions, present and future.

Reports brought by the majority of the representatives show that the paper bag business is in a satisfactory condition and that prospects for the future are bright.

The various branches of the Raymond Bag Company have sent their men to the Middletown factory for a personal inspection of the plant. Most of the sessions were conducted in the offices of the company where reports were submitted relative to trade conditions in various parts of the United States.

However, the gathering was not lacking in social features. An interesting program of entertainment was prepared by the company officials, including a dinner and dance at the Butler County Country Club near Hamilton. Other social affairs were arranged for the pleasure of the visitors who have looked forward to the meeting with keen interest.

A Remarkable Range of Grades, Textures and Weights

Orr Endless Felts can now be obtained up to 86 feet in length.

With our enlarged new equipment we can now furnish Paper Manufacturers with endless felts up to 86 feet in length.

Paper Manufacturers who carefully check manufacturing costs, and also strive to produce more and better paper at a lower cost per ton prefer the unvarying quality and long service of ORR felts. A trial of them will bring about a preference of them that will be lasting.

THE ORR FELT & BLANKET COMPANY, Piqua, Ohio

TEXAS GULF SULPHUR

99½ Per Cent Pure

Huge reserves, ample stocks of remarkably pure material and unexcelled service.

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Sulphur Deposit and Plant, Gulf, Matagorda County, Texas

West Virginia Pulp and Paper Company

Manufacturers of

SUPERCALENDERED and MACHINE FINISHED BOOK and LITHOGRAPHIC PAPERS

Offset, Envelope and Music Paper, High Grade Coated Book and Label Papers

also

Bleached Spruce Sulphite and Soda Pulp

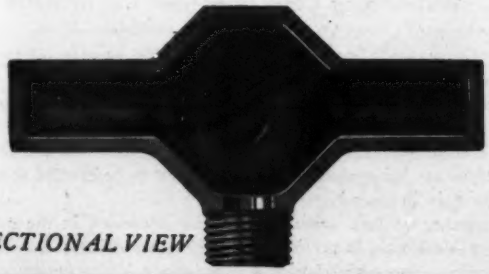
200 Fifth Avenue, New York — 732 Sherman Street, Chicago

503 Market St., San Francisco, Cal.

122 East 7th St., Los Angeles, Cal.

INCREASE YOUR WATER CAPACITY

A SAND VALVE FOR FILTRATION PLANTS



SECTIONAL VIEW

WHICH IS INTERCHANGEABLE—ELIMINATES REPAIRS —DOES NOT COLLECT REFUSE—WILL NOT BREAK WHILE BEING COVERED WITH SAND—A HIGH GRADE BRASS CASTING, SKILLFULLY MADE.

MANUFACTURED BY

CENTRAL MANUFACTURING CO.,

KALAMAZOO, MICH. *"THE QUICK SERVICE HOUSE"*

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, June 9, 1926.

With the summer season close at hand, trading in the local paper market is falling off perceptibly, although the demand for the various grades is holding up in a fairly satisfactory manner. Prices are generally well maintained, however, and there does not appear to be much talk of concessions. Sales organizations of the leading paper houses are continuing their activity, and are anticipating a good volume of business before the usual midsummer lull arrives.

News print production continues to expand and consumption is being steadily maintained. Contract withdrawals are generally moving at an excellent pace. Stocks in hand are reported to be below normal at the present time. Offerings in the spot market are rather limited and prices remain steady to firm.

The various grades of paper board are in fair request and prices are a little firmer. The fine paper market remains steady and not much falling off in demand has been experienced. Prices are practically unchanged. The tone of the coarse paper market is sound, while the demand for wrapping paper is excellent, and prices are unaltered from the recently quoted levels.

Mechanical Pulp

There is a slightly better feeling in the ground wood market and the demand shows some signs of expansion. Due to improved weather conditions grinding operations are gradually increasing and supplies should be more plentiful in the near future. Domestic mechanical pulp is quoted at from $30 to $33 a ton, f. o. b., mill, and Canadian ground wood at from $28 to $31. Imported moist mechanical pulp is selling at from $36 to $38 a ton, ex dock, and dry at from $37 to $40 a ton.

Chemical Pulp

Conditions in the chemical pulp market are fairly satisfactory although prices are a little weaker. The spot market has been somewhat relieved by the arrival of open water shipments in greater volume. Imported easy bleaching is now selling at from 3.35 to 3.50 cents a pound, but imported bleached sulphite continues steady at from 3.75 to 4.50 cents a pound.

Old Rope and Bagging

Both domestic and imported old rope continues in good request and prices are being well maintained. The tone of the bagging market is slightly easier, due to lower prices in the jute industry. Most of the purchasing reported of late has been in moderate quantities for immediate requirements. There have been no radical changes in quotations.

Rags

Buying has slightly improved in the foreign rag market and there is a much better feeling apparent, especially for the lower grades. An easier tone is prevalent in the domestic and old rag markets and prices have declined imperceptibly. A good volume of inquiries are being received for future business, however, and an improvement in the situation is anticipated in many quarters before long.

Waste Paper

The waste paper market is gradually improving and the lower grades, in particular, are in much better request. The supply of mixed paper is reported to be very limited and while prices so far are unchanged, an increase may be expected in the near future should the demand increase to any extent.

Twine

Demand in the twine market during the past week was mostly along routine lines. Should the excellent request for wrapping paper continue for any considerable time, however, the twine industry is sure to be affected favorably, and there is a possibility that the present low prices may be sharply advanced.

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., June 9, 1926.—The Government Printing Office has received the following bids for 5,000 sheets (1300 lbs. est.) medium gray ripple finish cover paper, 23 x 29, R. P. Andrews Paper Company, 24.42 cents per pound; Dobler & Mudge, 20 cents; and Lindemeyr & Harker 24.01 cents.

The Government Printing Office has received the following bids for 7,500 lbs. White Laid Antique Printing Paper, 20½ x 29—100; American Writing Paper Company, 12.75 cents per pound; Barton, Duer & Koch Paper Company, 11.9 cents; R. P. Andrews Paper Company, 11.49 cents; Whitaker Paper Company 11.87 cents; Old Dominion Paper Co., 12.74 cents; and Lindemeyr & Harker, 13 cents.

The Printing Office also has received the following bids for 80,000 lbs. Binders' Board, No. 2 quality, 25 x 30—No. 20: The Raybestos Company, $78.00 per ton; Whitaker Paper Company, $70.00; R. P. Andrews Paper Company, $71.00; Mathers-Lamm Paper Company, $76.00; Holliston Mills, Inc., $70.00; Dobler & Mudge, $72.00; Lindemeyr & Harker, $70.00; C. B. Hewitt Brothers, Inc., $75.00; and Consolidated Paper Company, $80.00.

The Printing Office has also received bids for 11,000 red rope envelopes, 11½ x 9½ and 100,000 Red Rope Manila Jackets 4 x 9½ or 11,000 red high finish sulphite Manila envelopes, 11½ x 9½ and 100,000 red high Manila jackets, 4 x 9½, as follows: Sherman Envelope Company, envelopes, $25.00 and jackets, $24.00 per thousand; United States Envelope Company, $25.30 and $20.95; Josephson Manufacturing Company, $29.00 and $20.00; Western States Envelope Company, $27.47 and $17.75; R. P. Andrews Paper Company, $25.90 and $18.60; Hano-Weinkrantz Company, $29.00 and $20.00; Western States Envelope Company, $25.00 and $42.50; and T. A. Cantwell & Company, $19.25 and $32.75.

The Holyoke Card and Paper Company has been awarded the contract for furnishing the Government Printing Office with 1,000 sheets of 22 x 28 gray melton board at $68.50, bids for which were received on May 21.

Parkersburg Corrugated Box Co. to Build

PARKERSBURG, W. Va., June 3, 1926—Officials of the Parkersburg Corrugated Box Company, the city's newest industry, announced that a contract for the erection of the new first unit of the company's Depot street plant has been awarded to the Plate Construction Company, local contracting firm.

The contract price is said to be about $50,000 for this first unit and plans are being made for a second unit to be erected soon after the first is in operation.

A number of local business men are interested in the company. George McDonald is president and the other officers and directors are men of successful business connections in Parkersburg.